

STIC Search Report

STIC Database Tracking Number 1992

TO: Sumesh Kaushal

Location: REM-2B85&2C70

Art Unit: 1633

Tuesday, August 09, 2005

Case Serial Number: 10/787382

From: Edward Hart

Location: Biotech-Chem Library

REM-1A55

Phone: 571-272-2512

edward.hart@uspto.gov

Search Notes

Examiner Kaushal,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart





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Total number of hits satisfying
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RESULT 1

ALIGNMENTS

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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: ACAINME AND FELINE IMMUNOREGULATORY PROTEINS, NUCI
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: 05/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NO.8: 154
SOFTWARE: PATENTIN VEr. 2.0
SEQ ID NO 80
LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
NAME/KEY: CDS
LOCATION: (29)..(430)
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Sequence

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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC!
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF ERG ID NOS: 154
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; GENERAL INFORMATION:
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Rammani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
BARLIER APPLICATION NUMBER: 09/322,409
BARLIER FILING DATE: 1999-05-28
BARLIER FILING DATE: 1999-05-28
CARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 80
LENGTH: 610
TYPE: DNA
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; FEATURE:
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                           Query Match 100.0%; Score 610; DB 4; Best Local Similarity 100.0%; Pred. No. 9.9e-301; Matches 610; Conservative 0; Mismatches 0;
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                                                                             AGAGACCTTGACACTGCTCTCCACTCGAACTTGGCTGATAGGCGATGGGAACCTGAT
                                                                                                                        TCTTGGGGCTGCCTATGTTTCTGCCTTTGCCTGTAGAAAATCCCATGAATAGACTGGTGGC
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-28
FEARLIER FILING DATE: 1998-05-29
NUMBER OF 58EQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
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US-09-451-527-82/c
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; ORGANISM: Canis familiaris
US-09-451-527-82
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Patent No. 6
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Best Local Similarity
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                               AGAGACCTTGACACTGCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGAT 180
                                                                                      TCTTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGC
                                                                                                                                        CAAGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTTGCTAGC
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                                                                                                                                                                                                        100.0%; Score 610; DB 4; ilarity 100.0%; Pred. No. 9.9e-301; Conservative 0; Mismatches 0;
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Drektz, Matthew J.
APPLICANT: Drektz, Matthew J.
APPLICANT: Or invention: Canine and Feline immunoregulatory proteins, nucleic Title Of invention: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 83
LENGTH: A02
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Best Local Similarity
                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Canis familiaris
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                      CGAACTTGGCTGATAGGCGATGGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC 208
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CGAACTTGGCTGATAGGCGATGGGAACCTGATGCTACTCCTGAAAATAAAAATCAC
                                                                                                     GCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT 148
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                                                                                                                                                                                                          65.9%; Score 402; DB 4; Lilarity 100.0%; Pred. No. 9.6e-195; Conservative 0; Mismatches 0;
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RESULT 6
US-09-322-409-84/c
; Sequence 84, Application
; Patent No. 6471957
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LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
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Best Local Similarity 100.0%; Pred. No. 9.6e-195;
Matches 402; Conservative 0; Mismatches 0;
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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                                                                                                 CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGGAGTGACAAAGTTCCTAGACTACCTGCAA 388
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RESULT 8 US-09-451-527-84/c

Sequence 84, Application US/09451527 Patent No. 6482403

GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Vang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527

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CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
EARLIER FILING DATE: 1998-05-29
EARLIER OF SEQ ID NOTE: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 83
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TYPE: DNA
; ORCANISM: Canis familiaris
US-09-451-527-83
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
FILE REFERENCE: IM-2-C2
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Patent No. 6482403
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                GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 430
                                                                                                       CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGATGACAAAGTTCCTAGACTACCTGCAA
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GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                              CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                                                                                                                                                         GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
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100.0%; Pred. No. 9.6e-195;
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CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 84
LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
US-09-451-527-84
                                                                                                                                                                       Sequence 1, Application US/09371615A

Patent No. 6537781

GENERAL INFORMATION:
APPLICANT: IDEXX LABORATORIES
ITITLE OF INVENTION: METHODS AND COMPOSITIONS CON
ITITLE OF INVENTION: CANINE INTERLEUKIN 5

FILE REFERENCE: 03604001700US00

CURRENT APPLICATION UNMBER: US/09/371,615A

CURRENT FILING DATE: 1999-08-10

NUMBER OF SEQ ID NOS: 8

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 1

LENGTH: 405
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US-09-371-615A-1
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Best Local
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                                                               393;
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                 ATGAGAATGCTTCTGAATTTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 430
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                                                              100.0%; P
                                                                                              64.4%;
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Pred. No. 3.7e-190;
                                                               Mismatches
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US-09-322-409-85
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GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 345; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 85
LENGTH: 345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: CDS
LOCATION: (1)..(345)
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FEATURE:
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326 CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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                                                         CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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                                   CACGGGGAGGCTGTGGATAAACTATTCCAAAAACTTGTCTTTAATAAAAAGAACACATAGAG
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RESULT 11
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; ORGANISM: Canis familiaris
US-09-322-409-87
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                                                                                                                                                                                                                                              RESULT 12
                                                                                                                                                   Sequence 85, Application US/09451527 Patent No. 6482403 GENERAL INFORMATION:
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Best Local Similarity
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APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-29
EARLIER APPLICATION UMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER: OF SEC ID NOS: 154
COURTENDED. DESCRIPTION OF SEC ID NOS: 154
COURTENDED. DESCRIPTION OF SEC ID NOS: 154
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
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CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1999-05-29
INUMBER OF SEQ ID NOS: 174
SOFTWARE: PATENTIN NUMBER: 00/087,306
EARLIER FILING DATE: 1998-05-29
INUMBER OF SEQ ID NOS: 174
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 85
LENGTH: 345
TYPE: DNA
ORGANISM: Canis familiaris
PERTURE:
INAME/COUL
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US-09-451-527-87/c
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US-09-451-527-85
                                                                                                                       CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
                                      US-09-451-527-87
                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 87, Application US/09451527
Patent No. 6482403
GENERAL INFORMATION:
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 Query Match
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
                                                   LENGTH: 345
TYPE: DNA
ORGANISM: Canis
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345; Conserv
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RESULT 14
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                                                                                                        OPERATING SYSTEM: FIN MS-DOS (Versic OPERATING SYSTEM: INM MS-DOS (Versic SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/999,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEPAX: 67-3510
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                                                                             TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
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MEDIUM TYPE: 3.5" Di
COMPUTER: IBM Compat
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APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
                                                    SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 5
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                    LENGTH:
STRANDEDNESS:
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611 West Sixth Street
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Search completed: August Job time : 124.226 secs

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                                                                                                                                 US-09-322-409-138
                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306 .
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 138
LENGTH: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 12; Conserv
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 6471957
                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FBLINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Sim, Gek-Kee APPLICANT: Yang, Shumin
                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                             OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Primer
                                                               Local Similarity
nes 22; Conserv
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                 413 GAGTGGACACCGGAAAGTTGAG 434
32 GAGTGGACACCGGAAAGTTGAG 11
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Pred. No. 0.38;
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Perfect score:
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1: geneseqn1980s:*
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Gapop 60.0 , Gapext 60.0
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Aaz54592 Canine IL-
Aaz54641 Human IL-
Aaa34088 Human ade
Aaf20210 Human IL-
                                                                                                                                                                                                                                            Description
         Abz95904 Human IL-
Abd19258 Human IL5
Synthetic
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Canine interleukin-5 (IL-5) cDNA.

14-MAR-2000 (first entry)

AAZ55546;

AAZ55546 standard; cDNA; 610

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	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26		c 24			c 21
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	ABZ96672	AAF20978	AAA34856	ADR12056	ADN12146	ABX04379	AAC73725	AAQ74056	AAN81381	ADP56009	ADI31910	ACF63368	ABZ96673	ADG33104	AAF20979	AAA13338	AAA34857	AAH92591	AAN81380	AAA43842	ABD19245	ABZ95899	AAF20205	AAA34083	AAX54636
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	Abz96672 Human nuc	Aaf20978 Human low	Aaa34856 Human ade	Adr12056 Human int	Adn12146 Interleuk	Abx04379 Human Int	Aac73725 Human IL-	Aaq74056 Human int	Aan81381 Entire nu	Adp56009 Human PRO	Adi31910 Human cDN	Acf63368 Human int	Abz96673 Human nuc	Adg33104 Human DNA	Aaf20979 Human low	Aaa13338 Human int	Aaa34857 Human ade	Aah92591 Human inf	Aan81380 A human B	Aaa43842 Human sec	Abd19245 Human IL5	Abz95899 Human IL-	Aaf20205 Human IL5	Aaa34083 Human ade	Aax54636 Human IL-

ALIGNMENTS

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Sequences AAZ55546-Z55551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine feline Flt-3 ligand, canine or feline CD40, canine or feline CD154
                                                                                                                                                                                                                       Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease.
                                                                                                                                                   Claim 1h; Page 223-224; 264pp; English.
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P-PSDB; AAY58219.
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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Best Local Similarity
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                   AAZS5547;
                                                    AAZ55547 standard; cDNA;
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Pred. No. 1.9
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Best Local Similarity
                                                                                                                                                                                                                                         Matches 610;
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GATTCCTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTTCAGGGTAT
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                                                 AGAGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGAT
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                                                                                                                                                                                                                                                      100.0%; Score 610;
100.0%; Pred. No. 1
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Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (II-5). The invention relates to canine II-4, canine or feline Filt-3 ligand, canine or feline CD40, canine or feline CD54 (CD40 ligand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins their associated nucleic acids, specific antibodies and inhibitors may be
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                                                                                                                                                                                                                                     CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                                                                                                                                                                                                          CGAACTTGGCTGATAGGCGATGGGAAACCTGATGATTCCTACTCCTGAAAAATAAAAATCAC
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                      GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                     CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                                                                                        CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGAGGTGACAAAGTTCCTAGACTACCTGCAA
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 GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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Pred. No. 2.8e-198;
0; Mismatches 0;
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RESULT 4
AAZ55549/c
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XX AAZ555
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CANine
XX Interl
KW immuno
XX Canis
XX Canis
XX O2-DEC
XX CanAX
PF 28-MAY
XX A (HESK-
XX Sim G,
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                                                                                                                                                                                          Canine interleukin-5
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                        (HESK-) HESKA CORP.
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on; tumour; cancer; autoimmune disease; vac
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   Dreitz MJ,
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   Wonderling
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RESULT 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CC Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (II-5). The invention relates to canine II-4, canine or Cc feline Flt-3 ligand, canine or feline CD40, canine or feline CD544 (CD40 ligand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and CC nucleotides which encode these immunoregulatory proteins. The proteins, CC their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC response in animals (particularly cats, dogs, horses and humans). They CC may be used to treat autoimmune or infectious diseases including CC allorgies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can CC also be used for the recombinant production of a protein, while CC nucleotide fragments are useful as probes, as amplification primers and CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
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Best Local S
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               Canine interleukin-5 coding sequence
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                                                                                                    AAF74300 standard; DNA; 405
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Similarity 100.0%; Pred. No. 2.8e-198;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 31; Page 46; 48pp;
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generating antibodies which
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P-PSDB; AAB72615.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    405 BP; 131 A; 77 C; 94 G; 103 T; 0 U; 0 Other;
GTATTTCTTGGTGTAATAAACACCGAGTGGACA 421
                                                                                                                                                                                                                                                                                                                                                                                                   GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
                                                    CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                                                                                            CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                                                                                                                                          GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                                                                                                              GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                                                                                                                                                                CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
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100.0%; Pred. No. 1
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h are useful in
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and polypeptides are used for treating allergies in dogs.
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14-MAR-2000

(first entry)

standard;

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Canine mature interleukin-5 (IL-5) cDNA

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Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 CC ligand), canine IL-5, canine IL-13, feline interferon-alpha (IPN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSP), and CC nucleotides which encode these immunoregulatory proteins. The proteins, CC their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC response in animals (particularly cats, dogs, horses and humans). They CC may be used to treat autoimmune or infectious diseases including CC allergies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can CC also be used for the recombinant production of a protein, while CC nucleotide fragments are useful as probes, as amplification primers and CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1h; Page 226-227; 264pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86 TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT 145
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                                                                                                                                                                                                                                                                                                                               CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 430
                                                                                               CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                                                                                                           CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                                                                                                                                                                                                                                                                                                              CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT
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                                                          CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 120 A; 68 C; 78 G; 79 T; 0 U; 0 Other;
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on; tumour; cancer; autoimmune disease; vaccine; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             56.6%; Score 345; DB 3; L6 100.0%; Pred. No. 1.2e-168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunoregulatory proteins from cats or dogs, preventing e.g. tumors or autoimmune disease
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                                                                                                                                                                                                                                                              Sequence 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sim G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Canine mature interleukin-5 (IL-5) cDNA complement
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                                                                                                                                                                                                       Local Similarity
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DB; AAY58220.
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                                                        CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT 205
                                                                                                                                TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCCTTGACACTGCTCCCACT 145
CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
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                                                                                                             TTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
                                     CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT
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                                                                                                                                                                                                   56.6%; Score 345; DB 3; L
100.0%; Pred. No. 1.2e-168;
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Matches 270; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one version of the IL-5 coding sequence shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel canine interleukin 5 polynucleotide and polypeptides are used for generating antibodies which are useful in treating allergies in dogs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dog; interleukin-5; IL-5; allergy; cancer; inflammatory reaction; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Canine interleukin-5 coding sequence #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 393 BP; 128 A; 82 C; 86 G; 97 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 35; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Guo H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (IDEX-) IDEXX LAB INC
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                                                                                                                                                                                                                                                                                           131 ACACTGCTCTCCACTCATCGATAGGCTGATAGGCGATGGGAACCTGATGATTCCTACT
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                                     121
                                                                                                                                                                             191 CCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTG
                                                                                                                                             61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lawton R, Mermer B,
                                                               AAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATA 310
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                                                                                                                                             CCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTG
                                                                                                                                                                                                                                                           ACACTGCTCTCCACTCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACT
                                                                                                                                                                                                                                                                                                                                                                44.3%; Sccilarity 100.0%; Pi
Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                   Score 270; DB 4; Lo; Pred. No. 1.2e-129; 0; Mismatches 0;
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The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can seed to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one version of the IL-5 coding sequence shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 252 BP; 69 A; 54 C; 60 G; 69 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Fig 1; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel canine interleukin 5 polynucleotide generating antibodies which are useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-AUG-2000; 2000WO-US021651.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammatory reaction; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Canine interleukin-5 coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (IDEX-) IDEXX LAB INC
                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001-191542/19.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lawton R, Mermer
                                                                                                                                                                                                GCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
                                                                                                                                                                                                                                                                                                                           ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
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                                      CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                        CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAATCAC
                                                                                                                                                                                                                                                GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
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CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                 CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                                                                                                            ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                        41.3%; Score 252; DB 4; Lilarity 100.0%; Pred. No. 2.7e-120; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and polypeptides are used for treating allergies in dogs.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 252;
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GGGGAGGCTGTG 252

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RESULT 10
AAT50756
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                                                                                                                                                       The sequences given in AAT50755-56 encode ovine interleukin-5 (IL-5). CC Ovine IL-5 or II-12 are used to treat and/or prevent infections in CC livestock (esp. cows and sheep), particularly where the animals are CC stressed, e.g. during transport. IL-5 and IL-12 can also be used as CC adjuvants in vaccines for veterinary use (partic. weakly immunogenic CC subunit or synthetic peptide vaccines). They may also be used to treat CC cancer, immunosuppression and allergy, to enhance/suppress the CC reproductive system and to promote growth or early maturity. Optionally CC interleukin can be delivered from constructs or delivery cells and CC infection. The interleukins are immunoassays for rapid diagnosis of CC promotes growth of early haematopoietic progenitor cells and generation CC of cytotoxic cells from themocytes, also it stimulates production and CC induces production of IgM and IgA (in synergism with bacterial endotoxin). IL-12 CC induces production of gamma-interferon by, and proliferation of, T and NK CC cells and increases the (non-)specific cytolytic lymphocyte response. The CC genetic constructs can also be used for in vitro production of IL-5 or - CC (Updated on 17-0CT-2003 to standardise OS field)
                                                              Query Match
Best Local S
Matches 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immunosuppression; allergy; reproductive system; growth; early maturity;
antibody; diagnosis; immunopotentiator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 6; Page 41-42; 78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seow H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-JUN-1995;
27-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12; Ivestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-OCT-2003
24-SEP-1997
                                                                                                                             Sequence 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-077528/07.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        early haematopoietic progenitor cell; cytotoxic cell; thymocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ovine IL-5 cDNA
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                            102 CCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCAC 144
                                                                  43,
                                                                               Similarity
CCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCAC 110
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                                                                                                                               B₽;
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                                                                            Score 43; pred. No.
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RESULT 11
AAT50755
ID AAT50755
ID AAT50755
AX AAT50767
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                  The sequences given in AAT50755-56 encode ovine interleukin-5 (IL-5). Ovine IL-5 or IL-12 are used to treat and/or prevent infections in livestock (esp. cows and sheep), particularly where the animals are stressed, e.g. during transport. IL-5 and IL-12 can also be used as adjuvants in vaccines for veterinary use (partic. weakly immunogenic subunit or synthetic peptide vaccines). They may also be used to treat cancer, immunosuppression and allergy, to enhance/suppress the reproductive system and to promote growth or early maturity. Optionally interleukin can be delivered from constructs or delivery cells and antibodies are useful in enzyme immunopstentiators, especially IL-5 promotes growth of early haematopoietic progenitor cells and generation of cytotoxic cells from thymocytes, also it stimulates production and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antibody; diagnosis; immunopotentiator; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-OCT-2003
24-SEP-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seow H,
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27-OCT-1995;
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(first entry)
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95AU-00006244.
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RESULT 12
AAZ44265
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Best Local S
Matches 43
                                                                                                   Query Match
Best Local Similarity
Matches 41; Conserv
                                                                                                                                                                                                                                                                       This invention describes a novel nucleic acid vaccine for preventing and curing human and pork cysticercosis. The invention involves the formation of a eukaryotic expression plasmid from fusion transcript expression unit consisting of three protective antigen genes (cCl, cCl and cC4) of pig tenial cysticercus and coexpression unit of related cell factor gamma interferon (IFN-gamma) and pork interleukin 5 (III-5)] genes. The production and purification process of said nucleic acid vaccine is simple and convenient, the physical and chemical properties of the vaccine is easy to store and transport, and possesses effective immunological protective function for human and pig cysticercosis. This sequence represents the pig II-5 gene used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        induces production of gamma-interferon by, and proliferation of, T and NK cells and increases the (non-)specific cytolytic lymphocyte response. The genetic constructs can also be used for in vitro production of II-5 or -12. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pig; vaccine; cysticercosis; protective antigen; cCl; cC3; cC4; tenial cysticercus; gamma interferon; IFN-gamma; interleukin 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                      Sequence 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-087904/08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Page 9; 21pp; Chinese.
  61
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                                                                                                                                                                                                                                                         of the invention
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43; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acid vaccine for cysticercosis co-contracted by human and
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                                ATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCC
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                                                                                                      Conservative
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                                                                                           100.0%; ---
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                                                                                                                                                                                                      A; 148 C;
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                                                                                                                           Score 41;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 43;
Pred. No.
                                                                                                                                                                                                    171 G;
                                                                                                      Mismatches
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                                                                                                                                                                                                      239 T;
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1.3e-11;
                                                                                                                           1.5e-10;
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                                                                                                                                                   Length 838;
                                                                                                                                                                                                    U; 0 Other;
                                                                                                   Indels
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RESULT 13
AAG57191
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     RESULT 14
AAZS5592/c
ID AAZS55
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Matches 22
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07-DEC-1992;
07-DEC-1992;
19-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This is an II-5 mRNA target sequence (nucleotide no. 61) of an enzymat: RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concn. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of
Interleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 ligand; CD154;
interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline;
granulocyte macrophage colony-stimulating factor; inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Interleukin-5; specific; cleavage; target RNA; protein; expression;
inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention
psoriasis; asthma; inflammatory diseases; restenosis;
                                                                                                     Canine IL-5
                                                                                                                                                     14-MAR-2000
                                                                                                                                                                                                  AAZ55592;
                                                                                                                                                                                                                                                  AAZ55592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 27 BP; 4 A; 4 C; 8 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 3; Page 17; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic RNA molecules which cleave \mathfrak{m}RNA - used to inflammatory, arthritic, stenotic or cardiovascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1994-048853/06.
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26-JUL-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               action is higher. (Updated on 25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammatory, arthritic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME
                                                                                                                                                                                                                                                                                                                                                                                                                      4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                         ATTTGAGTTTGCTAGCTCTTGG
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                                                                                                  antisense PCR primer, SEQ ID NO:138.
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93US-00008895.
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92US-00987132
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              response from a co-administered antigen. The nucleotide sequences can also be used for the recombinant production of a proteain, while nucleotide fragments are useful as probes, as amplification primers and as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug targetting. Sequences ARZ55491-Z55498, ARZ55513-Z55515 and ARZ55581-Z55608 represent PCR primers used in isolation, amplification and cloning of cDNAs encoding the immunoregulatory proteins of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including allergies, tumours, inflammation and graft rejection, and to increase the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFW-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins their associated nucleic acids, specific antibodies and inhibitors may be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acids encoding useful for treating or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immune response; immunoregulation; tumour; cancer; autoimmune disease;
vaccine; PCR; primer; ss.
acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lumnhoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to canine interleukin-4 (IL-4), canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 5B; Page 107; 264pp; English.
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                                                                    Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;
                                                                                                                                             Human IL-5 antisense oligonucleotide fragment.
                                                                                                                                                                                   05-JUL-1999
                                                                                                                                                                                                                                                         AAX54641 standard; DNA; 89 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
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lymphoma; carcinoma;
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Search completed: August Job time: 410.892 secs

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Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        colon cancer; breast cancer; lung cancer; pancreatic cancer;
hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                          Sequence 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               directed against at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-1997;
09-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prostate cancer;
                                                                                                                                                                                                                                   to the lungs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-229400/19
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ATTTGAGTTTGCTAGCTCTTGG
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                                                                                                                                                                             BP; 25
                                                         Conservative
                                                                                                                                                                                                                                   including breast and prostate cancer
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98US-00093972.
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Pred. No.
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                                                            Indels
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Sequence 4, Appli	Sequence 82, Appl	Sequence 80, Appl	Sequence 82, Appl	Sequence 80, Appl	Sequence 6, Appli	Sequence 4, Appli	Description

ALIGNMENTS

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FILE REFERENCE: IM-2-C1-C1

CURRENT APPLICATION NUMBER: US/09/755,633

CURRENT FILING DATE: 2001-01-05

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21

SOFTWARE: Patentin Ver. 2.1

SQ ID NO 4

LENGTH: 610

TYPE: DNA

ORGANIEM: Canis familiaris
                                                                   US-09-755-633-4
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Patent No. US20020127200A1
GENERAL INFORMATION:
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
                                                                                   NAME/KEY: CDS
LOCATION: (29)..(430)
                                                                                                                                   FEATURE:
100.0%;
Score 610;
Pred. No. 0;
                       밁
                    Length 610;
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FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
INUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver: 2.1
SEQ ID NO 6
LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
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US-09-755-633-6/c
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                               US-09-755-633-6
 Query Match
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                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/09755633 Patent No. US20020127200A1
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                              TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
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Weber, Eric R.
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Length 610;
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                                                   CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
INUMBER OF SEQ ID NOS: 154
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 80
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                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THERBOF FILE REFERENCE: IM-2-CI
                                                                                                                                                                                                                                                                                                        Sequence 80, Ap
Publication No.
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               ORGANISM: Canis familiaris
                              TYPE: DNA
 FEATURE:
                                          LENGTH: 610
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Application US/10218654 No. US20030099609A1
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GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin

APPLICANT: Yang, Shumin

APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PRO
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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; LOCATION: (29
US-10-218-654-80
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US-10-218-654-82/c
US-10-218-654-82/c
; Sequence 82, Application US/10218654
; Publication No. US20030099609A1
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; LENGTH: 610
; TYPE: DNA
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US-10-218-654-82
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US-10-262-439-80
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RESULT 5

US-10-282-439-80

US-10-282-439-80

Publication No. US20030143195A1

GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND PELINE IMMUNOREGULATORY PRO

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/10/262,439

CURRENT APPLICATION NUMBER: US/09/451,527

PRIOR APPLICATION NUMBER: US/09/451,527

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION DATE: 1999-05-28

PROTEINS,

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RESULT 6
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PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 80
                                                               Sequence 82, Application US/10262439
Publication No. US20030143196A1
GENERAL INFORMATION:
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Best Local Similarity
Matches 610; Conserv
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FEATURE:
NAME/KEY: CDS
LOCATION: (29)..(430)
 APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
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Pred. No. 0;
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Sequence 4, Application US/10787382
Publication No. US20040191868A1
GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
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Best Local Similarity
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FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-29
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 82
LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
US-10-262-439-82
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                           TTCAGAGACAAAGTAAATATTTCAGGCATCCTACTTATCACTTCACACAGAGGAAAA
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TTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTTTATCACTTCACACAGATGAAA
                                                                        TTTGGCGATGAGAATGAGGGCCAACCAACAGTAGGGACTTAATGGCCAGTATAACTAAGC
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Pred. No. 0;
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SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 4
LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
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Best Local S
Matches 610
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TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/99/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR FILING DATE: 2001-01-05
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR PRICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
NUMBER OF SEQ ID NOS: 21
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LOCATION: (29)..(430)
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100.0%; Pred. No. 0;
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RESULT 8

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FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/09/755,633
PRIOR APPLICATION NUMBER: US/09/755,633
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOPTWARE: PATENTIN VET. 2.1
SEQ ID NO 6
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TYPE: DNA
; ORGANISM: Canis familiaris
US-10-787-382-6
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Publication No. US20040191868A1
GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: MC
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Best Local Similarity 100.0%;
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TATATTTGAG
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                                                                          TTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTTTATCACTTCACACAGATGAAA
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Pred. No. 0;
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RESULT 10
US-09-755-633-8/c
US-09-755-633-8/c
; Sequence 8, Application US/09755633
; Patent No. US20020127200A1
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US-09-755-633-7
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TYPE: DNA
; ORGANISM: Canis familiaris
US-09-755-633-7
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                                                                                                    GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
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Best Local Similarity
Matches 402; Conserv
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APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CUCRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IN-2-C1-C1 CURRENT APPLICATION NUMBER: US/09/755,633

CURRENT FILING DATE: 2001-01-05
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100.0%; Pred. No. 1.1e-203;
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CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
INUMBER OF SEQ ID NOS: 154
SOPTWARE: Patentin Ver. 2.0
SEQ ID NO 83
LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
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PRIOR FILING DATE: 1999-05-28
PRIOR PRILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver: 2.1
SEQ ID NO 8
LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
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US-10-218-654-83
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                                                              US-10-218-654-83
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Publication No. US20030099609A1
GENERAL INFORMATION:
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Best Local Similarity
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                              APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: WONDERLING, RAMBONI S.
APPLICANT: WONDERLING, RAMBONI S.
APPLICANT: WONDERLING, RAMBONI S.
APPLICANT: WONDERLING, RAMBONI S.
APPLICANT: WONDERLING, AND USES THEREOF
FILE REFERENCE: IM-2-C1
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100.0%; Pred. No. 1.1e-203
ative 0; Mismatches 0;
65.9%;
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  Score 402;
Pred. No.
                   Length 402;
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103

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Sequence 84, Application US/10218654

Publication No. US20030099609A1

GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Vang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654

CURRENT APPLICATION NUMBER: US/9/322,409
PRIOR APPLICATION NUMBER: US/9/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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US-10-218-654-84/c
                                                                                                                                                                                                                                                                                                                                    ; LENGTH: 402
; TYPE: DNA
; ORGANISM: Canis familiaris
US-10-218-654-84
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                                       CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC 208
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APPLICANT: Wonderling, Ramani S.

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/10/262,439

CURRENT FILING DATE: 2002-09-30

PRIOR APPLICATION NUMBER: US/09/451,527

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 17-0

SOFTWARE: Patentin Ver. 2.0
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US-10-262-439-83
; Sequence 83, Application US/10262439
; Publication No. US20030143196A1
; GENERAL INFORMATION:
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TYPE: DNA
; ORGANISM: Canis familiaris
US-10-262-439-83
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CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                              CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA 388
                                                                                                                          GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC 328
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
APPLICANT: WONDERLING AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 84
                                                                                            RESULT 15
US-10-787-382-7
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Sequence 7, Application US/10787382
Publication No. US20040191868A1
GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 84, Application US/10262439 Publication No. US20030143196A1
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TYPE: DNA
ORGANISM: Canis familiaris
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; APPLICANT: Weber, Eric R.
; TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
; FILE REFERENCE: IM-2-C1-C1
; CURRENT APPLICATION NUMBER: US/10/787,382
; CURRENT FILING DATE: 2004-02-24
; PRIOR APPLICATION NUMBER: US/99/755,633
; PRIOR FILING DATE: 2001-01-05
; PRIOR APPLICATION NUMBER: 09/32,409
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/087,306
; PRIOR FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patentin Ver: 2.1
; SEQ ID NO 7
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TYPE: DNA
; ORGANISM: Canis familiaris
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GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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Search completed: August Job time : 502.96 secs 8 2005, 14:25:03

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CE144318 tigr-gss-	AI645939 mu12c07.y	AZ266075 RPCI-23-1	CE255920 tigr-gss-	CO756651 Mddb5004i	AA980077 ua28c09.r	AQ677395 HS_5526_A	BX514766 BX514766		CE553498 tigr-gas-	CE629992 tigr-gss-	CN448219 GUO_CDNA_	AI423120 tf23g07.x	AA200961 mu12c07.r	BQ456087 ke26c12.y	BH056804 RPCI-24-3		AI666525 mu22f12.x	AI666365 mu12c07.x	CE387560 tigr-gss-	CE713006 tigr-gss-

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                         335 AAAAGGTGTGCAGGAGAAAGATGGAGAGAGGACAAAGTTCCTAGACTACCTGCAAGTATTT
                                                                                                                                                                                                                                                                                                                                                    Contact: Kirkness EF
The Institute for Genomic Research
Department of Eukaryotic Genomics,
Rockville, MD 20850, USA
Tel: 301-838-0208
Fax: 301-838-0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 622)
Kirkness,E.F., Bafna,V., Halpern,A.L., Levy,S., Remington,K., Rusch,D.B., Delcher,A.L., Pop,M., Wang,W., Fraser,C.M. and Venter,J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Canis familiaris (dog)
Canis familiaris
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The dog genome: survey sequencing and comparative analysis Science 301 (5641), 1898-1903 (2003)
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tigr-gss-dog-17000333986568 Dog
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Conservative
                                                                                                                                                                                                                                                                                                                                       ekirknes@tigr.org
                                                                                                                                                     /organism="Canis familiaris"
/mol_type="genomic DNA"
/strain="Standard Poodle"
/db_xref="taxon:9615"
/clone_lib="Dog_Library"
/note="Site_1: BstXI; Libraries were prepared from peripheral blood"
                                                                                                                                                                                                                                                                                                    ocation/Qualifiers
                                                                  45.2%; Score 276; DB 9; Lo
100.0%; Pred. No. 3.3e-136;
Live 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Cushman JC
Department of Biochemistry
University of Nevada
MS200, Reno, NV 89557-0014, USA
Tel: 775-784-1918
                                                                                                                                                                                                                                                                                                                               Seq |
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Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; Vitaceae; Vitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (2002)
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Vitis vinifera var. Chardonnay
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cushman, J.C.
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                                                                                                                                                                                                                                                                                                                                quality sequence stop: 613
                                                                                              3.8%; Score 23; DB larity 100.0%; Pred. No. 1. Conservative 0; Mismatches
                                                                                                                                                              /tissue_type="berries" /tissue_type="berries" /dev_stage="mixed; 8, 9, 11, 13, 15, 16 weeks daf" /clone_lib="An expressed sequence tag database for abiotic stressed berries of Vitis vinifera var. Chardonnay" /note="Vector: Lambda Uni-Zap XR, Bluescript SK-; Site_1: EcoRI; Site_2: XhoI"
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/mol_type="mRNA"
/db_xref="taxon:29760"
/clone="VVD033F06"
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Best Local S
Matches 22
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1 (bases 1 to 405)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens IL5 gene, VIRTUAL genomic survey sequence. AY412020
                                                                                                                                                                 (lark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, Clark, A.G., Glanowski, S., Nielson, R., Lu, F., Murphy, B., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (16-NOV-2003) Celera Genomi
Rockville, MD 20850, USA
This sequence was made by sequencing
                                 Clark, A.G.,
                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
                                                                                                                                                                                                                                                                                                                     Pan troglodytes (chimpanzee)
Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                 genomic survey
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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GSS.
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(bases 1 to 405)
(bases 1 to 405)
.ark,A.G., Glanowski,S., Nielson,R., Thomas,P.,
.ark,A.G., Glanowski,S., Nielson,R., Lu,F.,
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Location/Qualifiers
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/mol_type="genomic DNA"
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                                                                                                    (5652),
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Pred. No.
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Murphy,B.,
                                                                                                                                                                                                                                    Kejariwal, A.,
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AUTHORS
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BC066281
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                                                                                                                                                                                                                                                                                                                                                     Strauberg, L., Feingold, E.A., Grouse, L.H., Derge, J.G.,

Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altechul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,

Stapleton, M., Soares, M.B., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Bouffard, G.G., Blakeeley, R.W., Touchman, J.W., Green, E.D.,

Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,

Butterfield, Y.S., Kzzywinski, M.I., Skalska, U., Smailus, D.E.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

Generation and initial analysis of more than 15,000 full-length

human and mouse cDNA sequences
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
                                                                                                                                           Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BC066281
456 bp mRNA linear HTC 12-FE;
Homo sapiens cDNA clone IMAGE:6971770, containing frame-shift
                                                                        NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ferriera, S.,
Adams, M.D. ar
                                                                                                                                                                                                                            Direct Submission
                                                                                                                                                                                                                                                   Strausberg, R
                                                                                                                                                                                                                                                                                                                 human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/mol_type="genomic DNA"
/db_xref="taxon:9598"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 22;
; Pred. No.
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CD559532
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This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                 Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethedd, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                                                                                            found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: IRBK1 row: g column: 11
High quality sequence stop: 456.
Location/Qualifiers
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National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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AGENCOURT 14497057 NIH MGC 195 F
IMAGE:6971772 5', mRNA sequence.
CDESCORS
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22; Conserv
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1 (bases 1 to 456)
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Mammalia; Eutheria; Primates;
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ilarity 100.0%;
Conservative
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6971772"
/tissue_type="mixed"
/lab_host="DHSA (Tl phage-resistant)"
                                                                                                                  organism="Homo sapiens"
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/clone_Tib="NIH_MGC_195"
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                                                                     xref="mRNA"
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Homo sapiens cDNA clone
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RESULT 7
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 456)
NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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/db xref="mxx:"/db xref="ftaxon:9606"
/db xref="ftaxon:9606"
/tissue_type="mixed"
/lab_host="NH5A (T1 phage-resistant)"
/clone_lib="NH5A (T1 phage-resistant)"
/clone_lib="NH1 MGC_195"
/clone_lib="NH1 MGC_195"
/clone="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
loxP-HindIII; Clones from this_library have been_
PCR-amplified using gene-specific primers to contain the complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is cDNA
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ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                         organism="Homo sapiens"
|mol_type="mRNA"
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100.0%; Pred. No.
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derived from either pooled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Biosciences/Clontech and Washington University). PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
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COMMENT
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CE 1 (bases 1 to 458)

Strausberg, R.L., Feingold, B.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Schaefer, C.F., Bhat, N.K., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsish, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., Abramson, R.D., Malak, J.A., Gunarathe, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Gibbs, R.A., Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Wadan, A., Young, A.C., Shevchenko, Y., Butterfield, Y.S., Kzzywinski, M.I., Skalska, U., Smallus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial snalves of force than 15 000 filllenorth
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
                                                                                                                                                                                                                                                                                 Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Generation and initial analysis of more than 15,000 human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BC066279 458 bp mRNA linear HTC 12-FE Homo sapiens cDNA clone IMAGE:6971768, containing frame-shift
                                                                                                                                                                                              NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                            Strausberg, R
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100.0%; Pred. No.
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Direct Submission
Submitted (03-FEB-2004) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032 This clone has the following problem: frame shifted.
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Series: IRAK Plate: 172 Row: a Column: 15
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                                                                                             Strausberg, R
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Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                             Generation and initial analysis of more than 15,000 full-length
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/mol type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6971.768"
/tissue_type="PCR rescued c
/clone_lib="NIH_MGC_195"
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Eutheria; Primates; Catarrhini; Hominidae; Homo
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Local Similarity
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rml0A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: IRBK1 row: g column: 08
High quality sequence stop: 463.
Location/Qualifiers
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NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
Tissue Procurement: Narayan Bhat Laboratory
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 94:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585603
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6971769"
/tissue_type="PCR rescued clones"
/clone_tib="NIH_MGC_195"
/lab_host="DH10B"
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(Dickson, Mark) mcd@paxil.stanford.edu
M., Schmutz, J., Grimwood, J., Rodriquez, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
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                                                                                                                                                                                                     National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can l
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.linl.gov
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                On Jun 10, 2003 this sequence version replaced gi:31585756. Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       467 bp mRNA linear ES: AGENCOURT 14496964 NIH MGC 195 Homo sapiens cDNA clone IMAGE:6971770 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 467)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                 High quality sequence start: 11
High quality sequence stop: 467
Location/Qualifiers
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
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PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is CDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Barl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology program, SAIC
Prederick, NCI-Prederick, Prederick, MD 21702). Por
information on which gene each clone represents, please
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ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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100.0%; Pred. No.
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                                                                                                                                                                                    g column: 09
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CD559690/c
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1. (bases 1 to 467)
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CD559690.2 GI:38453490
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/clone lib="NIH MGC_195"
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/note="vector: pDNR-Dual; Site_1: loxp-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/clontech and Washington University).
PCR products are directionally cloned into the loxp sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Barl Bere III and Hongling Liso (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/lmage/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/lab_host="DH5A (T1 phage-resistant)"
/clone lib="NIH_MGC_195"
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
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                                                                                                                             organism="Homo sapiens"
|mol_type="mRNA"
                                                                                                                                                                                        ocation/Qualifiers
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RESULT 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: IRBK1 row: g column: 10
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AGENCOURT_14497029 NIH_MGC_195 Homo sapiens cDNA clone
IMAGE:6971771 5', mRNA sequence.
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1 (bases 1 to 470)
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National Institutes of Health, Mammalian Gene Collection (MGC)
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Homo sapiens
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loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequence
available from NCBI's RefSeq). Template for PCR is cDNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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CD559689/c
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High quality sequence start: 16
High quality sequence stop: 473.
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http://image.llnl.gov
Plate: IRBK1 row: g column: 08
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On Jun 10, 2003 this sequence version replaced gi:31585757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 473)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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CD559689.2 GI:38453487
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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/db xref="taxxn: 9606"
/db xref="taxxn: 9606"
/clone="MMGE:6971769"
/tissue_type="mixed"
/lab host="DH5A (Ti phage-resistant)"
/lab host="DH5A (Ti phage-resistant)"
/clone_lib="NIH_MGC_195"
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/note="Vector: pDNR-bual; Site_1: loxP-Sall; Site_2:
/note="Tyector: pDNR-bual; Site_1: loxP-Sall; Site_2: loxP-Sall; Site_2:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Homo sapiens"
/mol_type="mRNA"
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
plate: IRBK2 row: g column: 10
High quality sequence start: 107
High quality sequence stop: 353.
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National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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Mammalia; Eutheria;
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(bases 1 to 477)
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                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
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visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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Issued_Patents_NA:*

1. /cgn2_6/ptodata/1/ina/5A_COMB.seq:*

2. /cgn2_6/ptodata/1/ina/5B_COMB.seq:*

3. /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4. /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5. /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

6. /cgn2_6/ptodata/1/ina/backfIles1.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Sequence 29, Appl Sequence 41, Appl	Sequence 31, Appl	43,	39,		27,	35,	3	Sequence 1, Appli	4.	4, p	87,	85,		85,	12:	2	Sequence 1, Appli	84	83,		83,	•	80,	Sequence 82, Appl	Sequence 80, Appl	Description

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39.4	42.2	- 45.8	58.2	90.6	90.6	90.6	124.4	126.4	140.8	141.8	144.8	144.8	145	149.2	152.4	152.4	F 14 - 1
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Sequence 22,	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Patent No.	Patent No.	2007001100
22, A	e 2, Appl	61, A	14, A	5, Appl	1, Ap	5, Ap	49, A	47, A	53, A	57, A	59, A	45, A	55, A	51, A	5324640	5324640	
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ALIGNMENTS

Qy 241 i	Qy 181 (Qy 121 1 Db 121 1	Qy 61 3 Db 61 3	شو د	Query Match Best Local Si Matches 610;	RESULT 1 US-09-322-409-80 ¡Sequence 80, Applica patent No. 6471957 ¡GENERAL INFORMATION: APPLICANT: Sim, Gek APPLICANT: Vang, Sh APPLICANT: Dreitz, APPLICANT: Dreitz, APPLICANT: MONderli ¡TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION: CURRENT APPLICATION CURRENT FILING DATE EARLIER FILING DATE EARLIER FILING DATE EARLIER APPLICATION SEQ ID NO 80 SOFTWARE: PATENTIN SEQ ID NO 80 TYPE: DNA ORGANISM: Canis fa PEATURE: NAME/KEY: CDS LOCATION: (29)(4 US-09-322-409-80
1 AGACACATTGAAGAACCAAACTGCCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTT 	1 GATTCCTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTAT 	1 AGAGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGAT 	TCTTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGC	CAAGGCAAACACTGAACAT	h 100.0%; Score 610; DB 4; Length 610; Similarity 100.0%; Pred. No. 9.2e-188; 10; Conservative 0; Mismatches 0; Indels 0;	pplication US/09322409 1957 1957 MATION: m, Gek-Kee ng, Shumin eitz, Matthew J. nderling, Ramani S. NTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NTION: NIMBER: US/09/322,409 G DATE: 1999-05-28 CATION NUMBER: 60/087,306 G DATE: 1998-05-29 ID NOS: 154 entin Ver. 2.0 nis familiaris S 9)(430)
					Gaps	MUCLBIC
300	240 240	180	120	60	0;	

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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
ITILE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 82
LENGTH: 610
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US-09-322-409-82
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US-09-322-409-82/c
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Best Local Similarity
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                       AGACACATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTT
                                                                               GATTCCTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTAT
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CURRENT FILLING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PALENTIN Ver. 2.0
SEQ ID NO 80
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US-09-451-527-80
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TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
NAME/KEY: CDS
LOCATION: (29)..(430)
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Best Local Similarity
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                                                                                                                                                                                                                   Matches 610; Conservative
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100.0%; Pred. No. 9.2e-188;
tive 0; Mismatches 0;
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APPLICANT: Dreītz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
                                                                                                                                                                                               61 TCTTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGC
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GATTCCTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTTCAGGGTAT
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/387,306
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
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US-09-451-527-82/c
                                                                                                                                                                                                                                                                                        ; SEQ ID NO 82
; LENGTH: 610
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-82
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Best Local Similarity
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                  AGAGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGAT 180
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                                                                                         TCTTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGC
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                                                                                                                                                                                                                100.0%; Score 610; DB 4; 1 ilarity 100.0%; Pred. No. 9.2e-188; Conservative 0; Mismatches 0;
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US-09-322-409-83
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                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 83
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                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Sin, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: MONDERING, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1996-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Canis familiaris
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                    CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC 208
                                                                                            GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT 148
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                                                                        GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
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                                                                                                                                                                                                                65.9%; Score 402; DB 4; Liarity 100.0%; Pred. No. 2.7e-120; Conservative 0; Mismatches 0;
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RESULT 6
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APPLICANT: Sim, Gek. Kee
APPLICANT: Sim, Gek. Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM.2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER PILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 1154
SOFTWARE: Patentin Ver. 2.0
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Best Local Similarity
Matches 402; Conserva
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Patent No. 6471957
GENTER: ---
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                                                                                    CAAAAAAAAAGGTGTGCAGGAGAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                                                                                                                                                   GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
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                                                                CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
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GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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Pred. No.
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Sequence 83, Application US/09451527

Patent No. 6482403

Patent N
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US-09-451-527-83
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                        Sequence 84, Application US/09451527
Patent No. 6482403
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS,
FILE REFERENCE: IM-2-C2
FILE REFERENCE: IM-2-C2
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Best Local Similarity
Matches 402; Conserv
CURRENT APPLICATION NUMBER: US/09/451,527
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TYPE: DNA
ORGANISM: Canis familiaris
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100.0%; Pred. No. 2.7e-120;
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CURRENT FILING DATE: 1999-12-01

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER FILING DATE: 1999-05-28

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 84

EINCTH: 402
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                                                               Query Match
Best Local S
Matches 403
                                                                                                                                                                                              TITLE OF INVENTION: METHODS AND COMPOSITIONS
TITLE OF INVENTION: CANINE INTERLEUKIN 5
FILE REFERENCE: 03604001700US00
CURRENT APPLICATION NUMBER: US/09/371,615A
CURRENT FILING DATE: 1999-08-10
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/09371615A Patent No. 6537781
GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                  -09-371-615A-1
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                                                                                                                                                LENGTH: 405
TYPE: DNA
ORGANISM: Canis familiaris
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                                                             Score 401.8; DB 4;
Pred. No. 3.2e-120;
0; Mismatches 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOPTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 816
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09079839
Patent No. 6048726
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Weltman, Joel K.
APPLICANT: Karim, Aftab S.
TITLE OF INVENTION: INHIBITION OF BOSINOPHILIC
FILE REFERENCE: 0998/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/079,839
CURRENT FILING DATE: 1998-05-15
NUMBER OF SEQ ID NOS: 2
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                                                                                                                                                                                                                                                                                GAGACCTTGACACTGCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATG
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GTGACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACA 421
                                                       TCTTTAATAAAAGAACACATAGAGCGCCAAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGA 361
                                                                                                       GGCACACTGGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAAGACTATTCAAAAACTTG
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                                   TCCTTAATAAAGAAATACATTGACGGCCAAAAAAAAAAGTGTGGAGAAGAAGAAGACGGAGA
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US-09-023-655-1236
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; CLONE: 9288309
US-09-023-655-1236
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Patent No. 6607879
                                                                                                                                                                            Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (650) 845-4166 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US
FILING DATE: HERWITH
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
CLASSIFICATION:
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APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                              IMMEDIATE SOURCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA
                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 816 base pairs
TYPE: nucleic acid
STRANDEDNESS; single
                                                                                                                                            Local Similarity 79.0
les 462; Conservative
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                                                                               AAGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCT
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3174 PORTER DRIVE
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79.0%;
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                                                                                                                                      Score 377.4; DB 4;
Pred. No. 3.9e-112;
0; Mismatches 121;
                                                                                                                                                                                                 Length 816;
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                                                                                                                                         Gaps
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US-09-322-409-85
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CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 85
LENGTH: 345
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                                                                                                                                                                                           Query Match
Best Local Similarity
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
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                                                          TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCACT
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APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 87
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Matches 345
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GENERAL INFORMATION:
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ORGANISM: Canis
-09-322-409-87
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANIME AND FELINE IMMUNOREGULATORY PROTEINS, NUC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/323,409
EARLIER APPLICATION NUMBER: 09/323,409
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
US-09-451-527-87/c
; Sequence 87, Application
; Patent No. 6482403
; GENERAL INFORMATION:
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SEQ ID NO 85
LENGTH: 345
TYPE: DNA
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GENERAL INFORMATION:
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Best Local Similarity
Matches 345; Conserv
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LOCATION: (1)..(345)
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100.0%; Pred. No. 8.2e-102;
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT ENLING DATE: 199-12-01
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409

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; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-87
Search completed: August Job time: 125.226 secs
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EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 87
LENGTH: 345
                                                                                                                                                                                                                                                                                                  Query Match 56.6%; Score 345; DB 4; Length 345; Best Local Similarity 100.0%; Pred. No. 8.2e-102; Matches 345; Conservative 0; Mismatches 0; Indels
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ALIGNMENTS

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Query Match	3'UTR ORIGIN	5'UTR CDS	source	JOURNAL	AUTHORS TITLE	REFERENCE	MEDLINE	JOURNAL	TITLE	REFERENCE		SOURCE ORGANISM	RESULT 1 AF331919 LOCUS DEFINITION ACCESSION VERSION VERSION KEYWORDS
tch 100.0%; Score 610; DB 4; Length 610;	/note="IL-5" /codon_start=1 /product="interleukin-5" /product="interleukin-5" /protein_id="AAL10715.1" /db_xref="GI:15919181" /translation="MRMILNUSLLALGAAYVSAFAVENPMNRLVAETLTLLSTHRTWL IGDGNLMIPTPENKNHOLCIKEVFQGIDTLKNQTAHGEAVDKLFQNLSLIKEHIERQK KRCAGERWRVTKFLDYLQVFLGVINTEWTPES" 433610	/organism="Canis familiaris" /mol type="mRNA" /db_xref="taxon:9615" 1 .28 29 .433		Submitted (22-DEC-2000) Immunology, Heska Corporation, 1613 Prospect Parkway, Ft Collins, CO 80525, USA Location/Oualifiers	Yang, S. Direct Submission	2 (bases 1 to 610)	21334408	J. Interferon Cytokine Res. 21 (6), 361-367 (2001)	rang.s., Selinis,k.S., Weber,E. and McCall.C. Canine interleukin-5: molecular characterization of the gene and		Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.	Canis familiaris (dog) Canis familiaris	AF331919 610 bp mRNA linear MAM 04-OCT-2001 Canis familiaris interleukin-5 mRNA, complete cds. AF331919 AF331919.1 GI:15919180

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           Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S. Canine and feline immunoregulatory proteins, nucl and method of using the same Patent: JP 2002516104-A 64 04-JUN-2002; HESKA CORP
OS Canis familiaris (dog)
PN JP 2002516104-A/64
PD 04-JUN-2002
PF 28-MAY-1999 US 60/087306
PI 08KKES SIM,SHUMIN YANG,MATTHEW J DREITZ,RAMA
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Canis familiaris (dog)

Canis familiaris

Eukharyota; Metazoa; Chordata; Craniata; Vertebrata;

Mammalia; Butheria; Carnivora; Fissipedia; Canidae;

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28-MAY-1999 JF 2000551002
29-MAY-1998 US 60/087306
GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S.
2N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00,
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PC G01N33/15,
PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC Canine and feline immunoregulatory proteins, nucleic acid CC molecules and
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/mol_type="genomic DNA"
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and feline immunoregulatory proteins, nu molecules and CC method of using the same Location/Qualifiers FT source 1.610
FT source /organism='Canis far
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PN JP 2002516104-A/65

PD 04-JUN-2002

PF 28-MAY-1999 JP 2000551002

PR 29-MAY-1998 US 60/087306

PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,

PC A61K45/00, A61K48/00, A61B37/02, A61B37/04, C07K14/475, C07K14/535,

PC C07K14/54,

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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
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/mol_type="genomic DNA"
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Patent: US 6471957-A 80 29-OCT-2002;
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 82 29-OCT-2002;
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Sequence 82 from patent
AR241537
AR241537.1 GI:27287246
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                   TTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTTTATCACTTCACACAGATGAAA
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/mol_type="genomic
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                 TATATTTGAG
                                                           TTTGGCGATGAGAATGAGGGCCAACCAACAGTAGGGACTTAATGGCCAGTATAACTAAGC
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n,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R. niney IL-13 immunoregulatory proteins and uses cent: US 6482403-A 80 19-NOV-2002;

Location/Qualifiers
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Conservative 0
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/mol_type="genomic
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Pred. No. 6.2e-154;
; Mismatches 0;
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RESULT 8
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Sequence 82
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney IL-13 immunoregulatory proteins and uses
Patent: US 6482403-A 82 19-MOV-2002;
Location/Qualifiers
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/mol_type="genomic |
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Pred. No. 6.2e-154;
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Padrid, P.A., Qin, Y., Wells, T.N., Solway, J. Sequence and structural analysis of feline Am. J. Vet. Res. 59 (10), 1263-1269 (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (15-SEP-1997) Medicine, Maryland Avenue, Chicago, IL 6063 Location/Qualifiers
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Padrid, P.A., Qin, Y.,
Camoretti-Mercado, B.
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/mol type="mRNA"
/db xref="taxon:9685"
/cell type="activated fe:
cells"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="IL-5"
/note="cytokine"
/codon_start=1
/product="interleukin-5"
/protein_id="AAC64505:1"
/db_xref="GI:3228519"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /translation="mrmllhlsllalgaayvsaiavqspmnrlvaetlallsthrtll
IGDGNLMIPTPEHNNHQLCIEEVFQGIDTLKNRTVPGDAVEKLFRNLSLIKEHIDRQK
KKCGGERWRVKKFLDYLQVFLGVINTEWTMES"
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                                                                                                                                                                                                                                                                                                                                                                                                                        Score 405.8; DB 4;
Pred. No. 9.7e-99;
0; Mismatches 67;
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Sim, G., Yang, S., Dreitz, M.J. and Wonderling, R.S.
Canine and feline immunoregulatory proteins, nuc
and method of using the same
Patent: JP 2002516104-A 66 04-JUN-2002;
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Canine and
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
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PR 29-MAY-1998 US 60/087306
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395, C A61K39/395,
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                                                                                           GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
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                                          СGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAATCAC 208
                                                                                                                                       GCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT 148
                                                                                                                                                                                                                  ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                         65.9%; Score 402; DB 6; I
larity 100.0%; Pred. No. 1.1e-97;
Conservative 0; Mismatches 0;
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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Canis familiaris
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                                                                                                                                                                                                                                                                                                      /organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="taxon:9615"
                                                                                                                                                                                                             100.0%;
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                                                                                                                                                                                                             Score 402; DB 6;
Pred. No. 1.1e-97;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Cal (bases 1 to 402)

Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nucleic ac and method of using the same
L Patent: JP 2002516104-A 67 04-JUN-2002;
HESKA CORP
OS Canis familiaris (dog)
PD 04-JUN-2002
PF 28-MAY-1999 JP 2000551002
PF 28-MAY-1999 JP 2000551002
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                                                                                        ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
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A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
C07K14/54,
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AR241538
AR241538.1
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.

Canine IL-4 immunoregulatory proteins and uses thereof Patent: US 6471957-A 83 29-OCT-2002;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
Unclassified.
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/mol_type="genomic|
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Best Local Similarity
Matches 402; Conserv
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Sequence
AR241539
AR241539.
                                     i (bases 1 to 402)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
Caniney IL-13 immunoregulatory proteins and use
Patent: US 6482403-A 83 19.NOV-2002;
Location/Qualifiers
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1 (bases 1 to 402)

Sim, G., Yang, S., Dreitz, M.J. and Wo Canine IL-4 immunoregulatory proteins Patent: US 6471957-A 84 29-OCT-2002;
Location/Qualifiers
                                                                                                                 Unknown
                                                                                                      Unclassified.
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/mol_type="genomic
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Pred. No. 1.1e-97;
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Sequence
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney II.-13 immunoregulatory proteins and uses
Patent: US 6482403-A 84 19-NOV-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                      Unknown.
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1 (bases 1 to 405)
1 (bases 1 to 405)
Guo, H., Lawton, R., Mermer, B. and Aiyappa, A. Methods and compositions concerning canine Methods and compositions 4 25-MAR-2003;
Location/Qualifiers
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Search completed: August 8, 2005, 05:12:04
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Post-processing: Minimum Match 0%
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Sequences AAZ55546-Z55551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40)

Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease.

Claim 1h; Page 223-224; 264pp; English.

1. 345 56.6 345 3 AAZ55550 2. 345 56.6 345 3 AAZ55550 Ca 3. 314.2 51.5 399 2 AAT50756 4. 293.8 48.2 393 4 AAF74306 5. 276.6 45.3 858 9 AAL61293 6. 275.6 45.2 402 1 AAN81380 6. 275.6 45.2 88.8 9 AAL61294 7. 275.6 44.2 38.0 38.1 AAZ56551 2. 232.4 38.0 38.1 Set 9 AAL61296 2. 249.4 40.9 38.5 3 AAA43842 2. 231.4 37.9 86.4 9 AAL61296 2. 231.4 37.9 86.4 9 AAL61296 2. 231.4 37.9 86.4 9 AAL61295 2. 217.6 35.7 15.3 1 AAN82431 5. 217.6 35.7 16.3 2 AAT88013 5. 217.6 35.7 16.3 2 AAV64062 8. 209.6 34.4 48.1 1 AAN80461 9. 200.4 33.8 399 2 AAV64062 9. 200.4 33.8 399 2 AAV64062 9. 200.4 33.8 399 2 AAV64062 9. 200.4 33.8 399 2 AAV114921 200.4 33.8 399 2 AAV14922 3. 194.6 31.9 342 2 AAT14921 3. 194.6 31.9 342 2 AAT14922 3. 194.6 31.9 342 2 AAT14924 4. 194.2 31.8 339 2 AAV64061 AAZ55546 standard; CDNA; 610 BP. Canine interleukin-5; IL-5; antibody; Canine; inhibitor; immune response
345 3 AAZ55550 345 3 AAZ55551 399 2 AAT50756 393 4 AAF74306 393 4 AAF74306 393 4 AAF74306 393 4 AAF74306 395 9 AAL61293 402 1 AAN81384 252 4 AAF74305 386 9 AAL61296 370 1 AAN81467 864 9 AAL61296 370 1 AAN82431 11534 2 AAT64062 1481 1 AAN82431 11534 2 AAT8013 1623 2 AAT14925 1623 2 AAT14925 1623 2 AAT14925 1623 2 AAT14925 1623 2 AAT14921 377 2 AAN164061 402 2 AAT14921 348 2 AAT14922 349 2 AAT14922 349 2 AAT14923 349 2 AAT14923 349 2 AAT14924 375 3 AAC68870 ALIGNMENTS 5; antibody; canine; inhibitor;
3 AAZ55550 3 AAZ55550 4 AAF74306 4 AAF74306 4 AAF74306 9 AAL61293 1 AANB180 9 AAL61294 AAR91647 1 AANB1842 1 AANB2431 2 AAT14925 1 AAN80461 2 AAV64062 1 AAN80461 2 AAV14925 2 AAV14925 2 AAT14921 2 AAT14923 2 AAT14923 2 AAT14923 2 AAT14923 3 AAC68870 3 AAC68870 3 AAC68870 4 AAC69870 5) CDNA.
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WPI; 2000-072623/06.
P-PSDB; AAY58219.
                                                          Sim G,
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                                                                                                                                                Canis familiaris.
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                                                                    (HESK-) HESKA CORP.
                                                         Yang S,
                                                                              98US-0087306P
                                                                                        99WO-US011942
                                                                                                                                Location/Qualifiers
29. .433
                                                           Dreitz MJ,
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/product= "Canine IL-5"
                                                          Wonderling RS;
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RESULT 2
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AC AAZ555
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Best Local Similarity
Matches 610; Conserv
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                   AAZ55547;
                                                  AAZ55547 standard; cDNA;
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                                                                                                                                                                                                                                                                         Sequence 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1h; Page 224-225; 264pp; English.
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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                                                                                                                                                                                                                       Similarity
                                                                                     TCTTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGC
                                                                                                                                                              CAAGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTGCTAGC
                                AGAGACCTTGACACTGCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGAT
                                                                                                                                   CAAGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGC
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ilarity 100.0%;
Conservative
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Pred. No. 4
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This invention describes a novel nucleic acid vaccine for preventing and curing human and pork cysticercosis. The invention involves the formation of a eukaryotic expression plasmid from fusion transcript expression unit consisting of three protective antigen genes (cCl, cC3 and cC4) of pig tenial cysticercus and coexpression unit of related cell factor gamma interferon (IFN-gamma) and pork interleukin 5 (IL-5) genes. The production and purification process of said nucleic acid vaccine is simple and convenient, the physical and chemical properties of the vaccine are stable, and the vaccine is easy to store and transport, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pig; vaccine; cysticercosis; protective antigen; cC1; cC3; cC4; tenial cysticercus; gamma interferon; IFN-gamma; interleukin 5;
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        29-MAY-1998;
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        98US-0087306P
                                               99WO-US011942
                                                                                                                                                                                                                                   IL-5;
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                                                                                                                                                                                                                                   antibody; canine;
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                                                                                                                                                                                                                                                                             (IL-5) cDNA coding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (IL-5). The invention relates to canine II-4, canine or CC feline Flt-3 ligand, canine or feline CD40, canine or feline CD34 (CD40 ligand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins, CC their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC may be used to treat autoimmune or infectious diseases including CC allergies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can CC also be used for the recombinant production of a protein, while CC nucleotide fragments are useful as probes, as amplification primers and CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug CC targetring.
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Best Local Simi
Matches 402;
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                  AAZ55549;
                                               AAZ55549
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for treating or
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (II-5). The invention relates to canine II-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD144 (CD40 CC ligand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and CC nucleotides which encode these immunoregulatory proteins. The proteins, CC their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC response in animals (particularly cats, dogs, horses and humans). They CC allergies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can CC also be used for the recombinant production of a protein, while CC nucleotide fragments are useful as probes, as amplification primers and CC nucleotide fragments are useful as probes, as amplification primers and CC nucleotide fragments are useful as probes, as amplification primers and CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 402; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1h;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Interleukin-5; IL-5; antibody; canine; inhibitor; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunoregulation; tumour; cancer; autoimmune disease; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000-072623/06
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acids encoding
for treating or
                                                                      CAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                                                                                                                        GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                                                                               CGAACTTGGCTGATAGGCGATGGGAACCTGATGCTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                   GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
                                                                                                                                                                                                                                                                         ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCCTTT
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                                                   CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                          CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 226; 264pp;
                                                                                                                                                                                                                                                                                                                                              65.9%; Score 402; DB 3; Lilarity 100.0%; Pred. No. 3.1e-109; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                       101 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dreitz MJ, Wonderling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immunoregulatory proteins from cats or preventing e.g. tumors or autoimmune di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                preventing e.g.
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                                                                                                                                                                                                                                                                                                                                                                                                                         U; 0 Other;
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Best Local
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                                                                                                                                                                                                                                                                                              The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one version of the IL-5 coding sequence shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF74300 standard; DNA; 405
                                                                                                                                                                                                                                                                                                                                                                                      Novel canine interleukin 5 polynucleotide generating antibodies which are useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-191542/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Guo H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-AUG-1999;
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                                                                                                                                                                                                                                                                        Sequence 405 BP; 131 A; 77 C; 94 G; 103 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                            Claim 31; Page 46; 48pp; English.
                                                                                                                                                                                                                                   Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lawton R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDEXX LAB
                                                                                                                                                                                                                                   Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA 43
                                                                                                                                                                                      ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTTCTGCCTTT
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 GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                         CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                      CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                         CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                               CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                 GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
                                                                                                                                                                        ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mermer B,
                                                                                                                                                                                                                                  65.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
                                                                                                                                                                                                                       Score 401.8; DB 4;
Pred. No. 3.6e-109;
0; Mismatches 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #1
                                                                                                                                                                                                                                                                                                                                                                                    and polypeptides are used for treating allergies in dogs.
                                                                                                                                                                                                                                                DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene therapy;
                                                                                                                                                                                                                         Indels
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                                          This invention relates to novel methods for diagnosing and monitoring autoimmune and chronic inflammatory diseases. Specifically, it refers to the identification of genes that have a clinical utility as diagnostic tools for the management of, in particular, patients with systemic lupus erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the present invention describes a method for determining the levels of multiple differentially expressed genes of a patient, in a concerted manner, in order to achieve an improved diagnostic assay with sensitivity and specificity for the disease in question. As such, these genes are useful for the diagnosis of various other inflammatory disorders including cholecystitis, Sjogren's disease, CREST syndrome, scleroderma, ankylosing spondylitis, ulcerative colitis, primary sclerosis. This polymucleotide is a DNA sequence representing human mRNA that is officerentially expressed in patients with SLE, used in an exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human; ds; autoimmune; chronic inflammatory disease; SLE; systemic lupus erythematosis; rheumatoid arthritis; cholecystitis; Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondyl
                                                                                                                                                                                                                                                                                                                                                             Diagnosing or monitoring autoimmune and chronic inflammatory diseases, such as rheumatoid arthritis, systemic lupus erythematosus, ulcerative colitis, psoriasis and asthma by detecting the expression level of one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ulcerative colitis; primary sclerosing diverticulitis; primary biliary scleros
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human DNA differentially expressed in patients with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADG33104
                                                                                                                                                                                                                                                                                                             Claim 18; SEQ ID NO 428; 877pp;
                                                                                                                                                                                                                                                                                                                                              more genes
                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-877243/81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wohlgemuth J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-APR-2002; 2002US-00131827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-APR-2003; 2003WO-US013015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003090694-A2
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                                invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTATTTCTTGGTGTAATAAACACCGAGTGGACAATGGAAAGTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fry K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Woodward R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    816
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                                                                                                                                                                                                                                                                                                             English.
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Query Match
Best Local Similarity
Matches 464; Conserv

Conservative

62.4%; A; 137

Score 380.6; DB 10 Pred. No. 9.8e-103; 0; Mismatches 119;

Indels Length Other;

Gaps

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816; 2

Sequence

816

B₽;

276

C; 165

G; 238

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AAA3487
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; phosphorothioate; impaired respiration; infilammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiaflammatory; antiaflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                               03-AUG-1998;
                                                                                                                                                                                       03-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                         WO200009525-A2
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                                             VIND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGACCTTGACACTGCTCCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATG
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                                      EAST CAROLINA
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5 밁 ð 밁 Ş 음 중 밁 ş 밁 S 밁 ક 밁 ई 밁 δ 밁

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CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, CC impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema. chronic obstructive cc fibrosis, pulmonary hypertension, emphysema chronic obstructive cc pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including corrections and prostate cancer. The reduction of the adenosine content of the CC ONs reduces side effects. The A-containing ONs break down with the crelease of deoxyadenosine which activates adenosine receptors causing throughout the sequence string from the present the nucleotide sequences given in the sequence listing from the present creation, which correspond to SEQ ID NO:1 to 2815, and then the last 185 equences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to CAAA3392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes a new composition comprising an antisens, oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, and antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vasoconstruction, inflammation, allergies, asthma, hy bronchitis, emphysema, respiratory distress syndrome,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 716; 1343pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English
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Sequence 816 BP; 277 62.1**%**; 79.1**%**; A; 137 C; 164 G; 238 T; Score 379; Pred. No. 2 DB 3; .9e-102; 0 G, Length 0 Other;

ð ঠ 밁 á 밁 S 밁 ঠ 밁 밁 S 밁 Ś 밁 S Query Match Best Local Matches 302 258 242 198 138 122 362 182 463; 78 18 N Similarity CCGGAAAGTTGAGAACAAACCGGCTTATTGTAGTGGAAGATTTTTGGAGAAGAATG--GTT GAGACCTTGACACTGCTCCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATG CTTGGGGCTGCCTATGTTTCTGCCTTTTGCTTAGAAAATCCCATGAATAGACTGGTGGCA AAGGCAAACACTGAACATTTCAGAGACTATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCT GTGACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACA GACACATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTG ATTCCTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATA CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCACAAGTGCATTGGTGAAA AAGGCAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT GTAAACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATA TCTTTAATAAAAGAACACATAGAGCGCCAAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGA GGCACACTGGAGAGTCAAACTGTGCAAGGGGGGTACTGTGGAAAGACTATTCAAAAACTTG ATTCCTGTTCCTGTACATAAAAATCACCAACTGTGCACTGAAGAAATCTTTCAGGGAATA GAGACCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCCAATGAGACTCTGAGG Conservative 0 Mismatches 120; Indels <u>ب</u> Gaps 437 421 377 361 241 197 181 121 77

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                                                                                                                                            S
                                                                                                                                                                                                                 Query Match
Best Local S
Matches 463
                                                                                                                                                                                                                                                                                                                                                                                                      This sequence represents the human interleukin-5 (IL-5) encoding nucleotide sequence. Interleukin-5 is involved in eosinophilic inflammation and inflammatory disorders. The present invention relates to an IL-5 antisense oligonucleotide (see AAA13337) which inhibits the expression of IL-5. The antisense oligonucleotide has at least one non-natural internucleoside linkage. The oligonucleotide is able to inhibit IL-5 secretion in a dose dependent manner, and is useful for inhibiting IL-5 expression and therefore treating inflammatory diseases, asthma, allergic rhinitis, allergic conjunctivitis and inflammatory skin diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide comprising non-natural internucleoside linkage, useful for inhibiting interleukin-5 expression and treating inflammatory diseases, asthma, allergic rhinitis, allergic conjunctivitis.
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                                                                                                                                                                                                                                                                                                                            Sequence 816
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (WELT/) WELTMAN J K. (KARI/) KARIM A S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAY-1998;
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  CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCACAAGTGCATTGGTGAAA
                                                   CTTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCA 121
                                                                                                          AAGGCAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT
                                                                                                                                         AAGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCT
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                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                              BP;
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                                                                                                                                                                                                                                     62.1%;
79.1%;
                                                                                                                                                                                                                                                                                                                            A; 137
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                                                                                                                                                                                                                                                                                                                              C; 164 G;
                                                                                                                                                                                                                 Score 379; DB 3; 1
Pred. No. 2.9e-102;
0; Mismatches 120;
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                                                                                                                                                                                                                                                                                                                              238 T; 0 U; 0 Other;
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                                                                                                                                                                                                        (NYCE/)
                                                                                       WPI; 2000-679539/66
                                                                                                                                                                                                                                                                                            06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                   24-MAR-2000; 2000WO-US008020
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chronic obstructive pulmonary disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human low adenosine antisense oligonucleotide related sequence #2546
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J W.
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Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful ${\rm e.g.}$ for treating cancers

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cc immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.

Cc The antisense oligonucleotides and (I) can be used to down-regulate the cc expression and or activity of target polypeptides associated with cc lung/respiratory disorders and malignancies, such as stimulating and cc activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and cc chemokines, endogenously produced specific and non-specific enzymes, cb inding proteins, adenosine receptors, bradykinin receptors, cytokine and cc hemokine receptors, adenosine receptors, bradykinin receptors, cytokine and cc hervous system (CNS) and peripheral nervous and non-nervous system peptide transmitters, binding proteins and malignancy associated proteins. The cc receptors, binding proteins and malignancy associated proteins. The cc including respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, allergy(ies) and/or sondition selected from pulmonary vasoconstriction, inflammation, calting, pain, cystic fibrosis (CP), allergic rhinitis (AR), pulmonary cancer. AAP18434 to AAP21543 represent human polynucleotide for the present invention of the present human polynucleotide condition and invention of the present human polynucleotide condition invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 463;
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Best Local !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oligonucleotides and compositions (1) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 816 BP; 277 A; 137 C; 164 G; 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              can have respiratory, bronchodilator, antiinflammatory,
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                                                                                                                                                                                       GTAAACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATA
                                                                                                                                                                                                                           GTGACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTATAAACACCCGAGTGGACA
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                                                               ATAGAAAGTTGAGACTAAACTGGTTTGTTGCAGCCAAAGATTTTTGGAGGAGAAGGACATT
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TTTTGGCGATGAGAATGAGGGCCAACCAACAGTAGGGACTTAATGGCCAGTATAACTAAG
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79.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 379; DB 3; Length 81
Pred. No. 2.9e-102;
0; Mismatches 120; Indels
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S 밁 ફ 밁 र् 밁 ঠ 밁 S 밁 ક 문 र् 밁 र् 밁 श

Query Match

Sequence

B₽;

277 A; 137

C; 164 G; 238 T;

0 U; 0 Other;

В

ARESULT 11
ARE96673
ID ARE96673
XX ARE96673
AC ARE96
AC A Ś 밁 B CC junctions of genes encoding a polypeptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an CC antiinflammatory steroid and ubiquinone. A composition of the invention CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, communosuppressive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or CC preventing a respiratory, lung or malignant disease or condition, also CC antiinflammatory steroid in a subject, for reducing or depleting levels of antiinflammatory steroid in a subject, for reducing or depleting levels of cof. or reducing sensitivity to adenosine, reducing levels of adenosine creceptor, producing bronchodilation, increasing levels of adenosine creceptor, producing bronchodilation, increasing levels of adenosine creceptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, cc lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO Human; antisense; lung dysfunction; nasal airway dysfunction; antianflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds. The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5 or 3 end genomic flashing regions, 5 and 3 intron-exon junctions, or regions within 2-10 nucleotides of Disclosure; Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or 24-APR-2001; 2001US-0286137P 23-APR-2002; 2002WO-US013135. 17-OCT-2003 ABZ96673 ABZ96673 standard; DNA; 816 WO200285308-A2 Homo sapiens (EPIG-) ftp.wipo.int/pub/published_pct_sequences 2003-229219/22. 498 nucleic Ś EPIGENESIS PHARM CTTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTTTATCA Li Y, Sa Tang L, CTTCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCA SEQ ID (first entry) acid sequence. Sandrasagra A, K L, Shahabuddin S; NO 11915; 872pp; INC 쁑 Katz English. Ħ Pabalan Ç Aguilar 584 which has a D

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                                                                                               antiulcer; antimigraine; neuroprotective; antiparkinsonian; analgesic; gymaecological; virucide; vulnerary; antiarthritic; antipsoriatic; cold; antimicrobial; cytostatic; litholytic; pathological disorder; depression; abnormal appetite; hypertension; hypercholesteroleemia; hyperlipidaemia; erectile dysfunction; anxiety; stress; inflammatory bowel syndrome; ulcerative colitis; Crohn's disease; renal stone; gall stone; migraine; constipation; headache; seizure; multiple sclerosis; polymyositis; fibromyalgia; Parkinson's disease; amyotrophic lateral sclerosis; trauma; chronic pain; pre-menstrual syndrome; sinusitis; carpal tunnel syndrome; chronic fatigue syndrome; rosacea; arthritis; psoriasis; prostatis; inflammation; heart burn; infection; colon cancer; malignant melanoma;
                                                                                                                                                                                                                                                                                               Human; pharmacological; hypotensive; antilipaemic; vasotropic; laxative; dermatological; antidepressant; tranquilliser; antiinflammatory; eczema;
                                                                                                                                                                                                                                                                                                                                                       Human interleukin 5 gene SEQ ID NO:90.
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WO2003006478-A1

á 밁 á 밁 Š 밁 Ś 망 cc modified oligonucleotide is complementary to a region of a gene cassociated with a pathological disorder. Also described: (1) a stociated with a pathological disorder. Also described: (1) a comprising (II), where the modified oligonucleotide is complementary to a cregion of a gene associated with a skin disorder. (1) and (II) can have the hypotensive, antilipaemic, vasotropic, dermatological, antidepressant, comeuroprotective, antiparakinsonian, analgesic, gynaecological, virucide, complementary, antiparakinsonian, analgesic, gynaecological, virucide, convergence of the literary, antimiparakinsonian, analgesic, gynaecological, virucide, convergence, antiparakinsonian, analgesic, gynaecological, virucide, convergence, antiparakinsonian, analgesic, gynaecological, virucide, convergence, antiparakinsonian, and pestite, hypertension, convergence, antiparakinson, constitute, hypertension, convergence, antiparakinson, constitute, hypertension, colds, constraine headache, seizure, multiple sclerosis, polymyositis, sinusitis, connic pain, pre-menstrual syndrome, trauma, carpal tunnel syndrome, chronic fatigue syndrome, rosacea, arthitis, psoriasis, prostatis, inflammation, heart burn, infection, poison ivy, colon cancer, malignant composition is useful for improving the appearance of the skin in an conditividual with a skin disorder. ACF63279 to ACF63410 represent invention and concleotide sequence given in the exemplification of the present invention. Matches Query Match Sequence Composition with a modified oligonucleotide useful for treating a patient with a pathological disorder such as abnormal appetite, hypertension, eczema, anxiety, stress, and cancer. linked by achiral 5'-3' internucleoside phosphate linkages, where the modified oligonucleotide is complementary to a region of a gene The present invading administration Claim 6; Page 90; 173pp; English. 10-JUL-2002; 2002WO-US021664 10-JUL-2001; 2001US-0303820P (OLIG-) OLIGOS ETC II) of 7-75 nucleotides containing 7 or more contiguous ribose groups Local 138 122 463; 78 62 18 2 AAGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCT Similarity GAGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATG AAGGCAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT GACACATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTG ATTCCTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTTCAGGGTATA CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCACAAGTGCATTGGTGAAA CTTGGGGCTGCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCA 816 BP; GAGACCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGACTCTGAGG Arrow A, invention describes a composition (I) suitable for in a mammal, which comprises a modified oligonu Conservative 277 A; 137 C; 164 G; 238 T; 0 62.1**%**; 79.1**%**; Thompson 0; Score 379; DB 10; Pred. No. 2.9e-102; Mismatches comprises a modified oligonucleotide U; O Length 816; Indels Other;

2;

Gaps

137

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ADP56009
ID ADP56
AC 
The present invention describes an isolated PRO nucleic acid (I). All described: (1) a vector comprising (I); (2) a host cell comprising the vector of (1); (3) a process for producing a PRO polypeptides; (4) are isolated PRO polypeptide; (5) a chimeric molecule comprising the polypeptide of (4) fused to a heterologous amino acid sequence; (6) a antibody which specifically binds to a polypeptide of (4); (7) a composition of matter comprising a polypeptide of (4), an agonist or antagonist of the polypeptide or an antibody that binds to the polypeptide in combination with a carrier: (A) an according to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human; PRO; immune related disease; inflammatory immune response; immune response stimulation; antiallergic; antianaemic; antiarthritic; immune response stimulation; antialfammatory; antipsoriatic; antiasthmatic; antidiabetic; antiinflammatory; antipsoriatic; antithyeoid; CNS; dermatological; gastrointestinal; haemostatic; hepatotropic; immunostimulant; immunosuppressive; muscular; nephrotropic; neuroprotective; osteopathic; respiratory; vasotropic; neuroprotective; osteopathic; respiratory; vasotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                     New PRO polynucleotides and polypeptides, useful in useful in diagnosing and treating an immune related disease, e.g. systemic lupus erythematosus, rheumatoid arthritis, diabetes mellitus or asthma and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB;
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                                                                                                                                                                                                                                                                                                                               Claim 2; SEQ
                                                                                                                                                                                                                                                                                                                                                                                          stimulating an immune response.
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CTTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTATTATCA
                                                   TTACTGCAGTGAGAATGAGGGCCAAGAAAGAGTCAGGCCTTAATTTTCAATATAATTTAA
                                                                             TTTTGGCGATGAGAATGAGGGCCAACCAACAGTAGGGACTTAATGGCCAGTATAACTAAG
                                                                                                                              ATAGAAAGTTGAGACTAAACTGGTTTGTTGCAGCCAAAGATTTTGGAGGAGAAGGACATT
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79.1%;
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0; Mismatches
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CC oligonuclectide (ON) with low adenosine (up to 15%), which targets conscient acids involved in bronchoconstriction, allergies, and/or CC inflammation. The ON can have antiinflammatory, antiallergic, and inflammation, the treatment of diseases associated with inflammation, CC impaired airways, including lung disease and diseases whose secondary CC effects afflict the lungs of a subject. They can be used for treating CC impeded respiration, respiratory distress syndrome, pain, cystic CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, CC carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the CC ONs reduces side effects. The A-containing ONs break down with the crucation and inflammation. AAA32313 to AAA35312 represent the invention, which correspond to SEQ ID NO:11 to 2815, and then the last 185 cc gequences given in the sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA3392) are specifically claimed ONs from the present invention do not match CC up with their corresponding SEQ ID NO: sequences given in the sequences given in the disclosure of the present invention do not match CC listing
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-205971/18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pulmonary hypertension; chronic obstructive pulmonar
cancer; leukaemia; lymphoma; carcinoma; metastasis;
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                                                                                                                                                                                                                     Sequence 4057 BP; 1303 A; 683 C; 796 G; 1275 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYEC-) UNIV EAST CAROLINA
                                                                                                                                                            Local Similarity
                                                             3259 AAGGCAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT
                                                                                                                                         463;
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CTTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCA 121
                                                                                    AAGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCT 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention describes a new composition comprising an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 717-718; 1343pp; English.
                                                                                                                                           Conservative
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79.1%;
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                                                                                                                                         Score 379; DB
Pred. No. 5.7e
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                                                                                                                                                            DB 3; I
5.7e-102;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Low adenosine antisense oligonucleotide; phosphorothicate; allergy; human; aliway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-MAR-2001
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                                                                                                                                                                                                                                                    06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human low adenosine antisense oligonucleotide related sequence #2547.
                                                                                                                                                                                                                                                                                                                   24-MAR-2000; 2000WO-US008020
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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bronchitis;
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WPI; 2000-679539/66

Nyce JW;

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Disclosure; Page 788-789; 1592pp; English
                                                                               and respiratory
                                                                                                       LOW adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                   obstructions.
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CC immunosuppressive, antiastimatic, hypotensive and cytostatic activities.

CC The antisense oligonucleotides and (I) can be used to down-regulate the cexpression and or activity of target polypeptides associated with activating peptide factors and malignancies, such as stimulating and communoglobulins and antibodies, antibody receptors, cytokines and communoglobulins and antibodies, antibody receptors, cytokines and communoglobulins and antibodies, antibody receptors, cytokines and communoglobulins and expression molecules and their receptors, cytokines and communoglobulins and antibodies, antibody receptors, cytokines and communoglobulins and antibodies, antibody receptors, cytokines and communoglobulins and antibodies, antibody receptors, cytokines and communoglobulins and antibodies and their receptors, cytokine and community community and peripheral nervous and non-nervous system peptide community. The community and peripheral nervous and non-nervous system peptide community and proteins and malignancy associated proteins. The complication proteins and malignancy associated proteins. The complication community pulmonary obstruction community pulmonary obstruction condition selected from pulmonary vasociated with a disease or condition selected from pulmonary vasociated with a disease or condition selected from pulmonary vasoconstriction, inflammation, callergies, asthma, impeded respiration, respiratory distress syndrome comply community community community disease (Copp), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary community, and community, and community, and community disease (Copp), community and community and community community. The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, the present invention

Sequence 4057 BP; 1303 A; 683 C; 796 G; 1275 T; 0 U; 0 Other;

62.1**%**; 79.1**%**;

Score 379; DB 3; 1 Pred. No. 5.7e-102;

Length 4057;

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Best Local Similarity
Matches 463; Conserv 3619 3559 3499 3439 3319 3259 3379 GAGACCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGACTCTGAGG 182 122 362 242 GACACATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTG 62 N ATAGAAAGTTGAGACTAAACTGGTTTGTTGCAGCCAAAGATTTTGGAGGAGAAGGACATT CCGGAAAGTTGAGAACAAACCGGCTTATTGTAGTGGAAGATTTTTTGGAGAAGAATAGGTTTT GTAAACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATA GTGACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACA 421 TCTTTAATAAAGAACACATAGAGCGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGA GGCACACTGGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAAGACTATTCAAAAACTTG ATTCCTGTTCCTGTACATAAAAATCACCAACTGTGCACTGAAGAAATCTTTCAGGGAATA ATTCCTACTCCTGAAAATAAAATCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATA GAGACCTTGACACTGCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATG CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCACAAGTGCATTGGTGAAA CTIGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCA AAGGCAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT AAGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCT Conservative 0; Mismatches 120; Indels N Gaps 3618 361 3558 3498 3438 3378 121 3318 481 301 241 181 61 3678

482 TTGGCGATGAGAATGAGGGCCAACCAACAGTAGGACTTAATGGCCAGTATAACTAAG 539	뮹	Qy	Db.	Ş
TTGGCGATGAGAATGAGGGCCAACCAACAGTAGGGACTTAATGGCCAGTATAACTAAG 539	3799	540	3739	482
	CTTCAGAGGGAAAGTAATTTCAGGCATACTGACACTTTGCCA 3843	CTTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTTTATCA 584	TTACTGCAGTGAGAATGAGGGCCAAGAAAGAGTCAGGCCTTAATTTTCAATATATAATTTAA 379	TTGGCGATGAGAATGAGGGCCAACCAACAGTAGGGACTTAATGGCCAGTATAACTAAG 539

Job time : 412.892 secs Search completed: August 8, 2005, 09:19:49

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Post-processing: Minimum Match 0%
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Copyright (c) 1993 - 2005 Compugen Ltd
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US-10-880-101A-91 US-09-800-629A-78	US-09-755-633-19	US-09-755-633-18 US-10-787-382-18	US-10-846-911-12	-10-295-074	-10-846-911-1	US-10-295-074-14	-10-295-074-1	US-10-846-911-8	-10-295-	US-10-787-382-21	US-09-755-633-21	-10-880-101A	-10-787-382-	-10-787-382-	US-10-262-439-87	US-10-262-439-85	US-10-218-654-87	US-10-218-654-85	US-09-755-633-11	US-09-755-633-9	-10-641-	-10-929-	US-10-191-997-90	-10-880-101A	-10-787-382	US-10-787-382-7	-10-262-	US-10-262-439-83	US-10-218-654-84	US-10-218-654-83		09-755-6	US-10-787-382-6
789	19,	Sequence 18, Appl Sequence 18, Appl	12	12,	14.	Sequence 14. Appl	į	8,	8	e 21	21,	85,	11	9, 2	87,	85,	87,	e 85,	11,	9	123		90,	87,	Ф,	7, 2	84,	83,	e 84,	8	8	7,	Sequence 6, Appli

ALIGNMENTS

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PRIOR APPLICATION NUMBER: 09/32:
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver: 2.1
SEQ ID NO 4
ENERTH: 610
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US-09-755-633-4
                                                                 US-09-755-633-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
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Patent No. US20020127200A1
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
                                                                                    NAME/KEY: CDS
LOCATION: (29)..(430)
                                                                                                                             TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09755633
                                                                                                                                                                                                                                                                                                                                         2001-01-05
MBER: 09/322,409
100.0%;
                                                                                                                                                                                                                                                                                                          60/087,306
  Score 610; DB 9;
Pred. No. 6e-179;
                    Length 610;
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APPLICANT: Wang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
ITILE OF INVENTION: CANIME AND FELINE IMMUNOREGULATORY PROTEINS, NUC
ITILE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
US-09-755-633-6/c
                                                                                                                      SOFTWARE:
SEQ ID NO 6
  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/09755633
Patent No. US20020127200A1
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                                                                                                                                           NUMBER OF SEQ ID NOS: 21 SOFTWARE: PatentIn Ver.
                                                          TYPE: DNA
ORGANISM: Canis
                                                                                                  LENGTH: 610
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  Score 610;
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          Sequence 80, Application US/10218654

Publication No. US20030099609A1

GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Sim, Gek-Kee

APPLICANT: Wonderling, Shumin

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C1

CURRENT APPLICATION NUMBER: US/09/322,409

PRIOR APPLICATION NUMBER: US/09/322,409

PRIOR APPLICATION NUMBER: US/09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 154

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 80

LENGTH: 610

TYPE: DNA

ORGANISM: Canis familiaxis
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US-10-218-654-80
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Sequence 82, Application US/10218654

Publication No. US20030099609A1

GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/10/218,654
CURRENT APPLICATION NUMBER: US/09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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US-10-218-654-80
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Sequence 80, Application US/10262439

Publication No. US20030143196A1

GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLBIC

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

PILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/10/262,439

CURRENT FILING DATE: 2002-09-30

PRIOR APPLICATION NUMBER: US/09/451,527

PRIOR FILING DATE: 1999-12-01

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR FILING DATE: 1999-05-28
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Best Local S
Matches 610
         Sequence 82, Application US/10262439
Publication No. US20030143196A1
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: CDS
LOCATION: (29)..(430)
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        RESULT 7
US-10-787-382-4
US-10-787-382-4; Sequence 4, Application US/10787382; Publication No. US20040191868A1; GENERAL INFORMATION:
; APPLICANT: Yang, Shumin; APPLICANT: McCall, Catherine A.
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FILE REFERENCE: IM-2-C2
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/10/262,439
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 82
LENGTH: 610
ORGANISM: Canis familiaris
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Best Local Similarity 100.0%;
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Pred. No. 6e-179;
Mismatches (
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CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/99/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR FILING DATE: 2001-01-05
PRIOR REPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-26
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 50/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver. 2.1
SOFTWARE: PATENTIN Ver. 2.1
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Best Local Similarity
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LOCATION: (29)..(430)
-10-787-382-4
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TYPE: DNA
ORGANISM: Canis f
FEATURE:
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TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
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                                                                   TTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTTTATCACTTCACACAGATGAAA
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RESULT 8

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Sequence 6, Application US/10787382

Publication No. US20040191868A1

GENERAL INFORMATION:

APPLICANT: Yang, Shumin

APPLICANT: Weber, Eric R.

APPLICANT: Weber, Eric R.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC

TITLE OF INVENTION: WIMBER: US/10/787,382

CURRENT APPLICATION NUMBER: US/10/787,382

CURRENT APPLICATION NUMBER: US/09/755,633

PRIOR APPLICATION NUMBER: US/09/755,633

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR PILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21

SOFTWARE: Patentin Ver: 2.1
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TYPE: DNA
; ORGANISM: Canis familiaris
US-10-787-382-6
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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                           AGTGACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGAC 420
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TATATTTGAG 610
                                             TTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTTTATCACTTCACACAGATGAAA
                                                                                  TTCAGAGACAAAGTAAATATTTCAGGCATCCTACTACTTTATCACTTCACACAGATGAAA 600
                                                                                                                                         TTTGGCGATGAGAATGAGGGCCAACCAACCAGTAGGGACTTAATGGCCAGTATAACTAAGC 540
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                                                                                                                                                                                                                                                                                                                                             AGACACATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTT
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Pred. No. 6e-179;
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APPLICANT: Vang, Shumin
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANUME AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 7
LENGTH. 402
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US-09-755-633-8/c

) Sequence 8, Application US/09755633

; Patent No. US20020127200A1
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TYPE: DNA
; ORGANISM: Canis familiaris
US-09-755-633-7
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                                                                                                                                                                     GENERAL INFORMATION:
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Best Local Similarity
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1 CURRENT APPLICATION NUMBER: US/09/755,633

CURRENT FILING DATE: 2001-01-05
                                                                                                     APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
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RESULT 11
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; TYPE: DNA; Canis familiaris; ORGANISM: Canis familiaris
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SEQ ID NO 8
LENGTH: 402
                                                     NUMBER OF SEQ ID NOS: 154
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 83
LENGTH: 402
                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 83, Application US/10218654
Publication No. US20030099609A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
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                                                                                                                                                                                                                                        APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELLIR IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
                                                                                                                            CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
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PRIOR FILING DATE: 1999-05-28
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100.0%; Pred. No. 2.8
tive 0; Mismatches
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Best Local Similarity

65.9%; 100.0%;

Score 402; Pred. No.

Length 402;

Query Match

103

163

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Sequence 84, Application US/10218654
Publication No. US20030099609A1
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
US-10-218-654-84/c
                                                                                                                                                                                                                                                                                                                                                        US-10-218-654-84
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT APPLICATION NUMBER: US/09/322,409
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 84
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TYPE: DNA
ORGANISM: Canis familiaris
                                                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                                          65.9%; Score 402; DB 14; Length 402; 100.0%; Pred. No. 2.8e-114; tive 0; Mismatches 0; Indels
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TYPE: DNA
; ORGANISM: Canis familiaris
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 83
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Best Local Similarity
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APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELLINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT FAPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR PILING DATE: 1999-12-01
PRIOR PILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR PILING DATE: 1998-05-28
PRIOR PILING DATE: 1998-05-29
PRIOR PILING DATE: 1998-05-29
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                                           CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA 388
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT PILING DATE: 2002-9-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-12-01
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1999-05-29
NUMBER OF SEG ID NOS: 198-05-29
NUMBER OF SEG ID NOS: 198-05-29
NUMBER OF SEG ID NOS: 198-05-29
NUMBER: Patentin Ver: 2.0
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US-10-787-382-7
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US-10-262-439-84/c
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Sequence 7, Application US/10787382
Publication No. US20040191868A1
GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
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TYPE: DNA
TYPE: DNA
ORGANISM: Canis familiaris
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CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/09/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-26
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN VET. 2.1
SOFTWARE: PATENTIN VET. 2.1
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Best Local Similarity
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TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
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GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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Search completed: August Job time : 507.007 secs 7, 2005, 19:24:56

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Result
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Maximum Match 100%
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Maximum DB seq length: 200000000
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AL238102 Tetraodon	CD242046 AGENCOURT	BH085356 RPCI-24-4	AL060243 Drosophil	AQ328856 nbxb0043P	BJ328648 BJ328648	BJ328562 BJ328562	AL108834 Drosophil	AG405650 Mus muscu	AZ650499 1M0520P08	AZ370501 1M0121K03	AL108811 Drosophil	CC804646 ih31h05.g	CD087271 MC1-0036T	AQ326668 nbxb0038G	AQ576964 nbxb0090I	BH135042 ENTNM83TF	AJ794087 AJ794087	BI670794 PfESToaa0	CG032226 PUIMU10TB	AA560540 vl19f05.r

ALIGNMENTS

TITLE TOTAL JOURNAL REMARK COMMENT	TITLE JOURNAL PUBMED REFERENCE AUTHORS	RESULT 1 BC069137 LOCUS DEFINITION ACCESSION VERSION VERSION VERYWORDS SOURCE ORGANISM REFERENCE AUTHORS
Direct Submission Submitted (16-APR-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA NIH-MGC Project URL: http://mgc.nci.nih.gov Contact: MGC help desk Email: cgapbs-r@mail.nih.gov Tissue Procurement: Anup Madan, University of Iowa CDNA Library Preparation: Anup Madan, University of Iowa	Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaeter, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soarce, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Uddin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, J., McEwan, R.J., Malek, J.A., Gunaratne, P.H., Richards, S., Morley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Pahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Wyers, R.M., Butterfield, Y.S., Krzywinski, M.I., Swalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002) Strausberg, R.	BC069137 BC069137 BC069137 BC069137 BC069137 BC069137.1 GI:46575644 HTC. HOMO Sapiens (human) HOMO Sapiens (human) HOMO Sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 817) Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G., Klausner,R.D., Collins,F.S., Wagner,L., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Bhat,N.K., Altachul S. F. Zoebbrag B. Bustow K.H., Schaefer,C.F., Altachul S. F. Zoebbrag B. Bustow K.H., Bus

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ACCESSION
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CD559532
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       CD559532 456 bp mRNA 1
AGENCOURT 14497057 NIH MGC 195 Homo sapiens
IMAGE:6971772 5', mRNA sequence.
CD559532
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This clone has the following problem: frame shifted.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Jessica Fahey, Tim Nelson, Jae Goon Yoon and Anup Madan
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/mol_type="mRNA"
/db_xref="taxon:9606"
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/clone lib="NIH_MGC_243"
/lab_host="TOP10"
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Query Match
Best Local Similarity
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Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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Plate: IRBK1 row: g column: 11
High quality sequence stop: 456.
Location/Qualifiers
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National Institutes of Health, Mammalian Gene Collection
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1 (bases 1 to 456)
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TTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTA
                                                                              GTTCCTGTACATAAAATCACCAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCACA
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/lab_host="UMSA (T1 phage-resistant)"
/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxp-Sali; Site_2:
/note="Vector: pDNR-Dual; Site_2: loxp-Sali; Site_2:
/from BD Biosciences/Clontech and Washington University).
/from BD Biosciences/Clontech and W
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/mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   368 AAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGGAGTGGACACCGGAA 427
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: IRBK1 row: g column: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 456)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1999)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IMAGE:6971772 3',
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      /lab_host="DHSA (TI phage-resistant)"
/clone_lib="NIH MCC 195"
/clone_lib="NIH MCC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-SalI; Site_2:
/note="Vector: pDNR-Dual; Site_1: loxP-SalI; Site_2:
loxP-HindIII, Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq! Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  quality sequence stop: 456.
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                                                                                                                                                                                                                                                                                                                                                                                          tissue_type="mixed"
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/clone="IMAGE:6971772"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Homo sapiens"
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Matches 363;
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                                                       e: IRBK1 row: g column: 10 quality sequence start: 14 quality sequence stop: 470.
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                                     Location/Qualifiers
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AAAGTTGAGACTAAACTGGTTTGTTGCAGCCAAAGA 1
                                                                                                                     ACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAG 37
                                                                                                                                                                                                                                                 CACTGGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAAGACTATTCAAAAAACTTGTCCT 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTTCCTGTACATAAAAATCACCAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGAACCTGATGATTC 185
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Pred. No. 1.8e-75;
0; Mismatches 93
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Contact: Daniela S. Gerhard, Ph.D.

Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat CDNA Library Preparation: Bhat Laboratory
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 470)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585755. CD559687 470 bp mRNA linear ESTAGENCOURT 14497029 NIH_MGC_195 Homo sapiens cDNA clone found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: IRBK1 row: g column: 10 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. /organism="Homo sapiens" linear EST 19-NOV-2003

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RESULT 5
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AGENCOURT 14496993 NIH MGC 195 Homo
IMAGE:6971771 5', mRNA Bequence.
CD559513
                                                      CD559533
CD559533.2
Eukaryota;
                         Homo sapiens (human)
                                                                                                                                                                                                               AAAGTTGAGAACAAACCGGCT 446
                                                                                                                                                                                                                                           ACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAG
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                                                                                                                                                                                    AAAGTTGAGACTAAACTGGTT 29
                                                                                                                                                                                                                                                                                                  TAATAAAGAAATACATTGACGGCCAAAAAAAAAAGTGTGGAGAAGAAGACGGAGAGTAA
                                                                                                                                                                                                                                                                                                                             TAATAAAAGAACACATAGAGCGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGA 365
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              sapiens
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/tissue_type="mixed"
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/db_xref="taxon:9606"
Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                        GI:38558947
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80.5%;
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                                                                                                sapiens cDNA clone
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             CACTGGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAAGACTATTCAAAAACTTGTCCT
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: IRBK1 row: g column: 10
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On Jun 10, 2003 this sequence version replaced gi:31585601.
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
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Bldg. 31 Rm10A07 Bethesda, MD 20892
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1 (bases 1 to 492)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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CATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTT
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                                                                       CTGTTCCTGTACATAAAAATCACCAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCA
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/lab host="PH5A (TI phage-resistant)"
/lab host="PH5A (TI phage-resistant)"
/clone lib="NH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Vector: pDNR-Dual resident of the mound gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Barl Bere II and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). Por
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/db_xref="taxon:9606"
/clone="IMAGE:6971771"
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/mol_type="mRNA"
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Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altechul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Boutfard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,

Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,

Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

Generation and initial analysis of more than 15,000 full-length

human and mouse cDNA sequences

Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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                                                                                                                                                                                                                                                                                   NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
DNA Sequencing by: Sequencing Group at the Stanford, CA 94305
Center, Stanford University School of Medicine, Stanford, CA 94305
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 17
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
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                                                                                                                                                                                                        http://www-shgc.stanford.edu (Dickson, Mark) mcd@paxil.stanford.edu (., Schmutz, J., Grimwood, J., Rodriquez,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eutheria;
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Unpublished (1999)
On Jun 10, 2003 this sequence version Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics / NIH National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892 Email: cgapbs-r@mail.nih.gov
                                                                                                              1 (bases 1 to 478)
NIH-MGC http://mgc.nci.nih.gov/.
NATIONALI Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/clone_lib="NIH_MGC_195"
/lab_host="DH10B"
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/db_xref="taxon:9606"
/clone="IMAGE:6971770"
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Pred. No. 1e-73;
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Best Local S
                                                                                                               381 ACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAG
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cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agancourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: IRBK1 row: g column: 09
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AAAGTTGAGACTAAACTGGTTTGTTGCAGCCAAAGAT 477
                                                                                                                                                                                                                                                                                                                                              CACTGGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAAGACTATTCAAAAACTTGTCCT
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                                                         AAAGTTGAGAACAAACCGGCTTATTGTAGTGGAAGAT 462
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/clone lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq!, Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 2702). For
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
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/clone="IMAGE:6971770"
/tissue_type="mixed"
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Best Local Similarity
Matches 367; Conserv
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Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                         4 GGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCT
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Location/Qualifiers
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Plate: IRBK1 row: g column: 08
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Office of Cancer Genomics
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National Institutes of Health, Mammalian Gene Collection (MGC)
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1 (bases 1 to 463)
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AGENCOURT 14496865 NIH MGC 195 Homo sapiens cDNA clone
IMAGE:6971769 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        On Jun 10, 2003 this sequence version replaced gi:31585603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CD559535
                                                                                                                        TGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGA 123
                                                                                                                                                                                                                          GACAAACGCAGAACGTTTCAGAGGCCATGAGGATGCTTCTGCATTTGAGTTTTGCTAGCTCT
                                                                          TGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCACAAGTGCATTGGTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /lab.host="UNEA (TI phage-resistant)"
/clone_lib="NIH_MGC_195"
/clone_lib="NIH_MGC_195"
/note="Vector: pDNR-Dual; Site_1: loxp-Sall; Site_2:
/note="Vector: pDNR-Dual; Site_2: loxp-Sall; Site_2: loxp-S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="IMAGE:6971769"
/tissue_type="mixed"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . 463
                                                                                                                                                                                                                                                                                                                                                                                                             49.3%;
79.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                         Score 300.8; DB Pred. No. 1.2e-73
                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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REFERENCE
AUTHORS
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ORGANISM
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BC066279
                                                                                                            REMARK
COMMENT
                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
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                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                          JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                    RS Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
RS Strausberg, R.L., Feingold, E.A., Grouse, L.H., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bossak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Boutfard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           423
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Homo sapiens cDNA clone IMAGE:6971768,
cDNA Library Preparation: Bhat Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Sequencing Group at the Stanford Human
                                                                                                                                                                         Direct Submission
Submitted (03-FBB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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                                                               Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                              Contact: MGC help desk
                                                                                                                              USA
NIH-MGC Project URL: http://mgc.nci.nih.
                                                                                                                                                                                                                                                                 Strausberg, R.
                                                                                                                                                                                                                                                                                                                              human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTAATAAAAGAACACATAGAGCGCC-AAAAAAAAGGTGTGTGCAGGAGAAAGATGGAĜAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGA 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGAAAGTTGAGACTAAACTGGTTTGTTGCAGCCAAAGAT 462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAAACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATAA 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTAATAAAGAAATACATTGACGGCCAAAAAAAAAAAGTGTGGAGAAGAAAAAGGGGAGAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 458)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                (26), 16899-16903
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                                                                                                                                                                                                                                                                                                                                (2002)
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KEYWORDS
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                                                                                                                                     ACCESSION
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                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                               ORGANISM
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GAAAGTTGAGACTAAACTGGTTTGTTGCAGCCAAAGAT 458

BC066280 BC066280.1

GI:42490838

Homo sapiens errors BC066280

CDNA

clone

IMAGE: 6971769, ď

mRNA

A linear containing

HTC 12-FEB-2004 frame-shift

Eukaryota; Metazoa; Mammalia; Eutheria; Homo sapiens

Chordata; Primates;

Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.

Homo sapiens (human)

έδ. 밁 S 문 Ś 밁 Ş 밁 Ś

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Query Match
Best Local Similarity
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                                                                                                                                                                    306
                                                                                                                                                                                                                                                                                       181
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                                                                                                                                                                                                                                                                                                                                                                                                           126
            425
                                                    361
                                                                                         365
                                                                                                                               301
                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         366;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Series: IRAK Plate: 172 Row: a Column: 15
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Clone distribution: MGC clone distribution through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Web site:
                                                                                                                                                                                                                                                                                                                                                                                             CCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTTGATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGA 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTTGCTAGCTCTTG
GAAAGTTGAGAACAAACCGGCTTATTGTAGTGGAAGAT 462
                                                                                                                                                      TAATAAAAGAACACATAGAGCGCC-AAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTG
                                                                                                                                                                                                            CACTGGAGAGTCAAACTGTGCAAGGGGGGTACTGTGGAAAAGACTATTCAAAAACTTGTCCT
                                                                                                                                                                                                                                   CATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTT
                                                                                                                                                                                                                                                                                       CTGTTCCTGTACATAAAAATCACCAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCA
                                                                                                                                                                                                                                                                                                                CTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACA
                                                                                                                                                                                                                                                                                                                                                                    CCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTG
                                                    AACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATAATA 420
                                                                                         ACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCG
                                                                                                                               TAATAAAGAAATACATTGACGGCCAAAAAAAAAAAGTGTGGAGAAGAAGAAGACGGAGAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="IMAGE:6971768"
/tissue_type="PCR rescued
/clone_lib="NIH_MGC_195"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           http://www-shgc.stanford.edu
(Dickson, Mark) mcd@paxil.stanford.edu
4., Schmutz, J., Grimwood, J., Rodrique
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 300.4; DB 3; Pred. No. 1.5e-73; Tanatches 91;
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Best Local Similarity
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Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.M.,
Villalon, D.K., Muzny, D.M., Sodesk, S.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Bouffard, G.G., Blakesley, R.M., Touchman, J.W., Green, E.D.,
Bouffard, G.G., Roha, S.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
1247923
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 943
Web site:
http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcdepaxil stanford.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
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Contact: MGC help desk
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Submitted (03-PBB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dickson, M., Schmutz, J., Grimwood, J., Rodriquez,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Strausberg, R.
                                                        GGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGA 125
                                                                                                                                                       CAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTTGCTAGCTCTTG 65
   GAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAGAGA
                                                                                                                       CAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTTGCTAGCTCTTG
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                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
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/db_xref="taxon:9606"
/clone=TiMAGE:6971769"
/tissue_type="PCR_rescued_c
/clone_Tib="NIH_MGC_195"
/lab_host="DH10B"
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High quality sequence start: 17
High quality sequence stop: 489.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
National Cancer Institute / NIH Bldg. 31 RmlDA07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
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AGENCOURT 14496804 NIH MGC 195 Homo
IMAGE: 6971768 5', mRNA sequence.
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On Jun 10, 2003 this sequence version
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1. (bases 1 to 489)
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National Institutes of Health, Mammalian Gene Collection (MGC)
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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PCR-amplified using gene-specific primers to contain the complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is cDNA derived from either pooled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues
                                                                                                         /db_xref="taxon:9606"
/clone="IMAGE:6971768"
                                                                                                                                                                                                                                                                 organism="Homo sapiens"
|mol_type="mRNA"
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Local Similarity 79.0
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                                                                     Unpublished (1999)
On Jun 10, 2003 this sequence version
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
                                                                                                                                                                                                              1 (bases 1 to 467)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Tissue Procurement: Narayan Bhat con CDNA Library Preparation: Bhat Laboratory
                                                   Email: cgapbs-r@mail.nih.gov
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGACTCTGAGGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
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Pred. No. 3.4e-73;
0; Mismatches 93;
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Best Loc Matches Query Match

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AAAGTTGAGACTAAACTGGTT 27 AAAGTTGAGAACAAACCGGCT CAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGG

TAATAAAAGAACACATAGAGCGCCAAAAAAAAAAGGTGTGCAGGAGAAAAAGATGGAGAGTGA 365 CACTGGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAAGACTATTCAAAAACTTGTCCT CATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTT 305 CTGTTCCTGTACATAAAAATCACCAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCA CTACTCCTGAAAATAAAAATCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACA CCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTC

ACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAG

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GGGCTGCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGA 125

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CCTTGACACTGCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTC 185 GAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAGAGA

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COMMENT

SOURCE ORGANISM

KEYWORDS

/ERSION ACCESSION RESULT 12 CD559688/c LOCUS

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                                                                                                                                                                   Similarity
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                                     CAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCTCTTG
CAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTG
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                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /lab host="DH5A (TI phage-resistant)"
/clone lib="NH5M (TI phage-resistant)"
/clone lib="NH MGC 195"
/clone lib="NH MGC 195"
/note="Vector: pDNR-Dual; Site 1: loxP-Sall; Site 2:
/note="Vector: pDNR-Dual; Site 1: loxP-Sall; Site 2:
/note-"Vector: pDNR-Dual; Site 1: loxP-Sall; Site 2:
/note-"Vector: pDNR-Dual; Site 1: loxP-Sall; Site 2:
/note-"Vector: pones from this library have been
PCR-amplified using gene-specific primers to contain the
Complete open reading frame (based on known gene sequences
available from WCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
                                                                                                                                                                                                                                                                                              visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                       (from BD Biosciences/Clontech and Washington University). PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
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/tissue_type="mixed"
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                                                                                                                                                            48.0%;
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                                                                                                                                 0; Mismatches
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                                                                                                                                                                Score 293; DB 6; Length 467; Pred. No. 1.9e-71;
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                                                                                                                                                                                  472 CAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTTGCTAGCTCTTG
                                                                                                                                                                                                                                                                                                           355;
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Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CD559689 473 bp mRNA linear ES' AGENCOURT_14496901 NIH_MGC_195 Homo sapiens cDNA clone IMAGE:6971769 5', mRNA sequence.
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CD559689.2 GI:38453487
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       National Institutes of Health, Mammalian Gene Collection (MGC)
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   CCTTGACACTGCTCCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTC 185
                                                           GAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCACAAGTGCATTGGTGAAAGAGA
                                                                                                                                                                                                                 CAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTTGCTAGCTCTTG 65
                                                                                                                   GGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGA
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quality sequence start: 16
quality sequence stop: 473.
Location/Qualifiers
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//lab_host="mbfA (TI phage-resistant)"
//clone_lib="NIH_MGC_195"
//note="Vector: pDNR-Dual; Site_1: loxP-SalI; Site_2:
loxP-HindIII, Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NOBI's RefSeg). Template for PCR is CDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our annoymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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tissue_type="mixed"
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Pred. No. 2.8e-71;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                High quality sequence stop: 467.
Location/Qualifiers
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AGENCOURT 14496838 NIH_MGC_195 Homo
IMAGE:6971788 5', mRNA sequence.
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Bldg. 31 Rmil0A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585758
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1 (bases 1 to 467)
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National Institutes of Health, Mammalian Gene Collection (MGC)
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
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/db xref="taxxxx:"
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/lab host="DH5A (T1 phage-resistant)"
/lab host="DH5A (T1 phage-resistant)"
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/clone="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2: lox
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of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For

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2 (bases 1 to 405)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwa Clark, A.G., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B. Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J. Adams, M.D. and Cargill, M.
                                                                                                                               Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 405)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
Adams, M.D. and Cargill, M.
Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                        gene
                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                     Science 302 (5652), 1960-1963 (2003)
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Pred. No. 3.1e-71;
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Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive,
Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering
them based on alignment.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGTTGA
                                                                             CAAAAAAAAAGGTGTGCAGGAGAAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA 388
                                                                                                                                    GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
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GAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGTTGA
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
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/locus_tag="HCM4418"
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Search completed: August 8, 2005, 08:46:05 Job time : 2602.79 secs

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AR254496 Sequence AR254497 Sequence AP091133 Canis fam AX083948 Sequence AF331920 Canis fam

U35038 Ovis aries
U17052 Ovis aries
AJ010088 Sus scrof
AJ133452 Sus scrof
AF068770 Felis cat
Z67872 B. taurus mR
AF025436 Felis cat
AC149665 Bos tauru
U91947 Equus cabal
AF051372 Felis cat
AF24756 Saimiri s
U34588 Cavia porce
AC148886 Otolemur
AC148885 Otolemur
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PN JP 2002516104-A/66

PD 04-JUN-2002

PF 28-MAY-1999 JP 2000551002

PF 29-MAY-1999 US 60/087306

PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A6131/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,

PC A61K39/395,

PC A61K49/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535,

PC C07K14/54,

PC C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC G01N33/15,
                                                 molecules and CC method of FH Key FT source
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1 (bases 1 to 402)
Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nucleic acid molecules and method of using the same
Patent: JP 2002516104-A 66 04-JUN-2002;
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

E 1 (bases 1 to 402)

Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nucleic acid molecules and method of using the same
Patent: JP 2002516104-A 67 04-JUN-2002;

B Canis familiaris (dog)
DN JP 2002516104-A/67
PD 04-JUN-2002
PC 28-MAY-1999 US 60/087306
PR 29-MAY-1998 US 60/087306
                PC A61K39/395,
PC A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C0
PC C07K14/54,
PC C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C11
PC C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C11
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PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC
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                                                                                                                                                              C07K14/54,
C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10,
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                                                                                                                                                                                                  A61K39/395,
A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
 /organism='Canis familiaris (dog)'
Location/Qualifiers
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Pred. No. 2e-218;
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AR241538
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 83
AR241538
AR241538.1
                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 402)
Sim,G.-Y. Yang,S., Dreitz,M.J. and Wonderling,
Sim,G.-Y.-Yang,S., Dreitz,M.J. and Wonderling,
Canine IL.-4 immunoregulatory proteins and uses
Patent: US 6471957-A 83 29-OCT-2002;
Location/Qualifiers
                                                                                                                                                   1 ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                      Unclassified
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CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                      GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
                                                                      GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTCCTCCACTCAT
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/organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="taxon:9615"
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/mol_type="genomic
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Pred. No. 2e-218;
; Mismatches 0;
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Pred. No. 2e-218;
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KEYWORDS
SOURCE
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 84 29-OCT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 84 from patent AR241539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unclassified.
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                                                                                                                                                                                                                                                                                                          GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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                                                                  CAAAAAAAAGTTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTTCCTAGACTACCTGCAA
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GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
              GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                               CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                                                                                                                                             CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACTTGAAGAACCAAACTGCCCAC
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/mol_type="genomic |
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Pred. No. 2e-218;
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney II.-13 immunoregulatory proteins and uses
Patent: US 6482403-A 83 19-NOV-2002;
Location/Qualifiers
                                                                    1 (bases 1 to 402)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney IL-13 immunoregulatory proteins and uses
Patent: US 6482403-A 84 19-NOV-2002;
Location/Qualifiers
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/mol_type="genomic DNA"
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Mammalia; Entheria; Carnivora; Fissipedia; Canidae; Canif
Mammalia; Entheria; Carnivora; Fissipedia; Canidae; Canidae; Canidae; Canidae; Call; C.
Canines I to 610)
Yang, S., Sellins, K.S., Weber, E. and McCall, C.
Canine interleukin-5: molecular characterization of the
expression of biologically active recombinant protein
T. Interferon Cytokine Res. 21 (6), 361-367 (2001)
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Canis familiaris interleukin-5 |
AF331919
                                                                                                                                                                                                                     Submitted (22-DEC-2000) Immunology, Heska Corporation, Prospect Parkway, Ft Collins, CO 80525, USA Location/Qualifiers
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                         /translation="MRMLLNLSLLALGAAYVSAFAVENPMNRLVAETLTLLSTHRTWL
IGDGNLMIPTPENKNHOLCIKEVFQGIDTLKNQTAHGEAVDKLFQNLSLIKEHIERQK
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433. .610
                                                                           /codon start=1
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/mol_type="mRNA"
/db_xref="taxon:9615"
                                                                                                                               note="IL-5"
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JP 2002516104-A/64.
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/mol_type="genomic
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Location/Qualifiers
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Canine and feline immunoregulatory proteins, and method of using the same Patent: JP 2002516104-A 64 04-JUN-2002;
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
1 (bases 1 to 610)
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organism="Canis familiaris"
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Location/Qualifiers
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Pred. No. 2.1e-218;
; Mismatches 0;
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                                                                                                         HESKA CORP
OS Canis familiaris (dog)
OS Canis familiaris (dog)
PN JP 2002516104-A/65
PD 04-JUN-2002
PF 28-MAY-1999 JP 2000551002
PF 28-MAY-1999 US 60/087306
PF 29-MAY-1998 US 60/087306
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,
PC A61K39/395,
PC A61K39/395,
PC A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535,
PC C07K14/54,
PC C07K14/54,
PC C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC G01N3/15,
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BD211559
 PC G01N33/50,C12N15/00,A61K37/02,A61
and feline immunoregulatory proteins,
molecules and
CC method of using the same
CH Key Location/Qualifie
FT source /organism='Canis
FT forms /organism='Canis
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Canis familiaris
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malia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
(bases 1 to 610)
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A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
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 /organism='Canis familiaris (dog)'.
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Sim, 6-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 80 29-OCT-2002;
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                                                                                                                                                                                                                                                                                                                                                                      Unclassified.
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                                                                                               ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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mol_type="genomic |
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.

Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.

Canine IL-4 immunoregulatory proteins and uses thereof

Patent: US 6471957-A 82 29-OCT-2002;

Location/Qualifiers
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Pred. No. 2.1e-218;
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RESULT 12
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                                          (bases 1 to 610)
m,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R
miney II-13 immunoregulatory proteins and uses
tent: US 6482403-A 82 19-NOV-2002;
Location/Qualifiers
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m,G.-K., Yang,S., Dreitz,M.J. and Wonc niney IL-13 immunoregulatory proteins tent: US 6402403-A 80 19-NOV-2002;
Location/Qualifiers
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/mol_type="genomic
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Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.P.
Methods and compositions concerning canine in
Patent: US 6537781-A 1 25-MAR-2003;
Location/Qualifiers
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Methods and compositions concerning canine interleukin
Patent: WO 0111049-A 1 15-PEB-2001;
IDEXX LABORATORIES, INC. (US)
On Jun 24, 2001 this sequence version replaced gi:13189
Loccation/Qualifiers
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Sequence 1 from Patent W00111049.
AX083939 GI:14532940
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
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/db_xref="taxon:9615"
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14-MAR-2000

(first entry)

AAZ55548;

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ALIGNMENTS

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Sequences AAZ55546-Z55551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GWCSF), and nucleotides which encode these immunoregulatory proteins. The proteins their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune
                                                                                                                                                                                                                                    WPI; 2000-072623/06.
P-PSDB; AAY58219.
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                                                                                                                                                     Claim 1h; Page 225; 264pp; English.
                                                                                                                                                                                   Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease
                                                                                                                                                                                                                                                                                       Sim G,
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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AAA34088 AAF20210

ABD19258 AAT06755

ABZ95904

Aaa34088 Human Ide Aaf20210 Human IL5 Abz95904 Human IL5 Abd19258 Human IL5 Aat06755 Synthetic

Aaa34088 Aaf20210

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                Sim G,
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Nucleic acids encoding immunoregulatory proteins from cats or dogs, pr

Reful for treating or preventing e.g. tumors or autoimmune disease.

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Claim 1h; Page 226; 264pp; English.

XX

Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC feline lhi. Page 226; 264pp; English.

XX

Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 ligand), canine IL-5). The invention relates to canine IL-4, canine or CC interleukin-5 (II-5). The invention relates to canine or feline CD154 (CD40 conine Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 conine Flt-3 ligand), canine IL-13, feline interferon-alpha (IFN-alpha) conditions which encode these immunoregulatory proteins. The proteins, and conclectides which encode these immunoregulatory proteins. The proteins, considered as vaccines for therapeutic or prophylactic regulation of an immune consequence in animals (particularly cats, dogs, horses and inhibitors may be used to treat autoimmune or infectious diseases including canine considered antigen. The nucleotide sequences can concleotide fragments are useful as probes, as amplification primers and can sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators to factivity, while the antibodies may be used in detection, and in drug targetting

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Sequence 402 BP; 101 A; 93 C; 79 G; 129 T; 0 U; 0 Other;
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RESULT 3
AAZ55546
ID AAZ55546;
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AC AAZ55546;
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DT 14-MAR-2000 (first entry)
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DB Canine interleukin-5 (IL-5) cDNA.
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Interleukin-5; IL-5; antibody; canine; inhibitor;
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response;

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for treating or
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                                                                                                                                                            CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                  GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                        CAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                                                                                                                                                                                                        CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                                          CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                               GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
                                                                                                                                                                                                                                                                                  ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 402; DB 3; Length 610; ilarity 100.0%; Pred. No. 3.6e-198; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 202 A; 114 C; 139 G; 155 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0087306P
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/product= "Canine IL-5"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wonderling RS;
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RESULT 4

AAZ55547/c

ID Z5555

XX AAZ555

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                                                                                      Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC cinterleukin-5 (II-5). The invention relates to canine II-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 ligand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and cnucleotides which encode these immunoregulatory proteins. The proteins, CC their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC response in animals (particularly cats, dogs, horses and humans). They CC may be used to treat autolumnune or infectious diseases including CC allorgies, tumours, inflammation and graft rejection, and to increase the cresponse from a co-administered antigen. The nucleotide sequences can CC nucleotide fragments are useful as probes, as amplification primers and CC nucleotide fragments are useful as probes, as amplification primers and cofficients may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAR-2000
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HESK-) HESKA CORP
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Query Match Best Local Similarity

100.0%;

Score 402; DB 3; Pred. No. 3.6e-198;

Length 610

Sequence

610

ВP;

155

A; 139 C;

114 G; 202

T; 0 U; 0 Other;

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RESULT 5
AAF743000
ID AAF743000
ID AAF7
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                                         The present invention provides the protein and coding sequences of camine interleukin-5 (IL-5) protein. This can be used to treat alle cancer and inflammatory reactions in dogs. The present sequence is version of the IL-5 coding sequence shown in the specification
  Sequence
                                                                                                                                                                                                       Novel canine interleukin 5 polynucleotide generating antibodies which are useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dog; interle
                                                                                                                                                                                                                                                                             P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                    10-AUG-1999;
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                                                                                                                                                           Page 46; 48pp; English.
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Best Local S
Matches 393
Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline FD1-3 ligand, canine or feline CD40, canine or feline CD44 (CD4-1igand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and
                                                                         Claim
                                                                                                Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease.
                                                                                                                                     WPI; 2000-072623/06.
P-PSDB; AAY58220.
                                                                                                                                                                         Sim G,
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immunoregulation;
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100.0%; Pred. No. 1.7e-193;
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RESULT 7
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Best Local Similarity
Matches 345; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Canis familiaris.
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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       WPI; 2000-072623/06
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tive 0; Mismatches 0;
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CC Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (II-5). The invention relates to canine II-4, canine or CC feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 (CD40)), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and CC nucleotides which encode these immunoregulatory proteins. The proteins, CC their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune cresponse in animals (particularly cats, dogs, horses and humans). They CC may be used to treat autoimmune or infectious diseases including CC allergies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can CC also be used for the recombinant production of a protein, while CC nucleotide fragments are useful as probes, as amplification primers and CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease.
                                                      targetting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1h; Page 228; 264pp; English
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Sequence 345 BP; 79 A; 78 C; 68 G; 120 T; 0 U; 0 Other;

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Best Local
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                                                                                                                         165
                                                                                                                                                                                                                    178
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                           358
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45
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                                                                                                                                                                                                                                                                             CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT 177
                   CAAGTATTTCTTGGTGTAATAAACACCGGAGTGGACACCGGAAAGT 402
                                                                                                                                                                                                              CACCAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                                                                                                                                                                                                                                                                                                 TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
                                                                                         CGCCAAAAAAAAAGGTGTGCAGGAGAAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                                                         CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                                                        CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                                                                                       CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                                                                                                                                                                                                                     CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAT
                                                                                                                                                                                                                                                                                                               TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCCACT
CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                             CGCCAAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                          85.8%;
                                                                                                                                                                                                                                                                                                                                                                                          Score 345; DB 3; L; Pred. No. 1.4e-168;
                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                    237
                                                                                                                                                                                                                                                     226
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04-MAY-2001

(first entry)

AAF74306 standard; DNA;

393

Canine interleukin-5 coding sequence

Dog; interleukin-5; IL-5; allergy; cancer; gene therapy; inflammatory reaction; ds.

WO200111049-A2

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RESULT 9
AAF74305
ID AAF7
XX AAF7
XX AAF7
XX O4-M
XX Cani
XX Dog;
KW infl
XX Dog;
KW infl
XX Cani
XX Dog;
KW infl
XX O8 Cani
XX O9-F
XX W020
PD 15-F
XX 09-F
XX 10-F
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Best Local Similarity
Matches 270; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one version of the IL-5 coding sequence shown in the specification
                                                                                                                                                                                                                                                                                                                                                                     Canine
                           10-AUG-1999;
                                                                              09-AUG-2000; 2000WO-US021651.
                                                                                                                                                                                     WO200111049-A2
                                                                                                                                                                                                                                                                                                                                                                                                                      04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF74305 standard; DNA; 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 393 BP; 128 A; 82 C; 86 G; 97 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 35; 48pp; English.
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                                                                                                                                  15-FEB-2001.
                                                                                                                                                                                                                                                                                    interleukin-5; IL-5; allergy; cancer;
ammatory reaction; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001-191542/19
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                                                                                                                                                                                                                                                                                                                                                                     interleukin-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ne interleukin 5 polynucleotide antibodies which are useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                   coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67.2%; Score 270;
100.0%; Pred. No.
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ches 0;
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                                                                                                                                                                                                                                                                                                               gene
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                                                                                                                                                                                                                                                                                                               therapy;
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AAT50756

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DT 24-S

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Cytc

KW live

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XX

OS Ovis

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VX

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PD 03-C

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PP 14-C

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                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
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Best Local S
Matches 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 200
P-PSDB;
                                                                                                                                                         Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12; livestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer; immunosuppression; allergy; reproductive system; growth; early maturity; antibody; diagnosis; immunopotentiator; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one version of the IL-5 coding sequence shown in the specification
            14-JUN-1995;
27-OCT-1995;
                                                                                03-JAN-1997
                                                                                                                                    Ovis aries.
                                                                                                                                                                                                                                                          Ovine IL-5 cDNA.
                                                                                                                                                                                                                                                                                   17-OCT-2003
24-SEP-1997
                                                                                                                                                                                                                                                                                                                            AATS0756;
                                                                                                                                                                                                                                                                                                                                                     AAT50756
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel canine interleukin 5 polynucleotide and polypeptides are used f
                                                     14-JUN-1996;
                                                                                                         WO9700321-A1
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DB; AAB72616.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
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95AU-00006244
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Pred. No. 2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 43; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock
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exon
                                                                                                                                            CDS
                                                                                                                                                                                                                   antibody; diagnosis; immunopotentiator; early haematopoietic progenitor cell; cytosecretion; IgM; IgA; bacterial endotoxin;
                                                                                                                                                                                                                                                                                                   Cytokine; ovine;
                                                                                                                                                                                                                                                                                                                                 Ovine IL-5 gene
                                                                                                                                                                                                                                                                                                                                                                   17-OCT-2003
24-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 399
                                              exon
                                                                                             exon
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT50755 standard; DNA; 520 BP.
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                                                                                                                                                                                                                                                                  mmunosuppression; allergy; reproductive system; growth;
                                                                                                                                                                                                                                                                                   'ytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12;
ivestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer;
                                                                                                                                                                                          aries.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74 CCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCAC 116
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/number= 2
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                                                                                                                                                           Location/Qualifiers
                                                          'number=
                                             84. .216
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                                                                                                          product= "Ovine_IL-5"
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Pred. No.
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o. 9.9e-12;
o. 9.9e-13;
                                                                                                                                                                                                                                      cytotoxic cell; thymocyte;
                                                                                                                                                                                                                       gamma-interferon;
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-JUN-1995;
27-OCT-1995;
                                                              Pig; vaccine; cysticercosis; protective antigen; tenial cysticercus; gamma interferon; IFN-gamma;
                                                                                                                                                                                                               AAZ44265 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-077528/07
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                                 Sus scrofa.
                                                                                                                 Porcine IL-5 DNA
                                                                                                                                                31-MAR-2000
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                                                                                                                                                                                                                                                                                             113 CCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCAC 155
                                                                                                                                                                                                                                                                                                                   74 CCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCAC 116
                                                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                              (first entry)
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95AU-00006244.
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                                                                                                                                                                                                                                                                                                                                                                                            10.7%;
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Pred. No.
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                                                                  cC1; cC3; cC interleukin
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Best Local Similarity
Matches 41; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           consisting of three protective antigen genes (CC1, CC3 and CC4) of pig tenial cysticercus and coexpression unit of related cell factor gamma interferon (IFN-gamma) and pork interleukin 5 (III-5)] genes. The production and purification process of said mucleic acid vaccine is simple and convenient, the physical and chemical properties of the vaccine are stable, and the vaccine is easy to store and transport, and possesses effective immunological protective function for human and pig cysticercosis. This sequence represents the pig IL-5 gene used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel nucleic acid vaccine for preventing and curing human and pork cysticercosis. The invention involves the formation of a eukaryotic expression plasmid from fusion transcript expression unit
                                                                                                                                                                                                                  Interleukin-5; specific; cleavage; target RNA; protein; e
inhibitor; inhibition; ribozyme; treatment; prophylaxis;
psoriasis; asthma; inflammatory diseases; restenosis;
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                                                                     17-JUL-1992;
07-DEC-1992;
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                                                                                                                                  03-FEB-1994.
                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                        cardiovascular
                                                                                                                                                                                                                                                                    Enzymatic
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26-JUL-1994
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            (RIBO-)
                                             07-DEC-1992;
07-DEC-1992;
                                                                                                          02-JUL-1993;
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                                                                                                                                                                                                                                                                                                                                                   AAQ57191 standard; mRNA;
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                                                                                                                                                                                                                                                                                                                                                                                                              ATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCC
                                                                                                                                                                                                                                                                   RNA molecule IL-5 mRNA target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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(first en
                                 92US-00916763.
92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
                                                                                                                                                                                                        condition; hypertension; arthritis;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary vasoconstriction; emphysema; carcinoma; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This is an IL-5 mRNA target sequence (nucleotide no. 61) of an enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concm. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of action is higher. (Updated on 25-MAR-2003 to correct PN field.)
     The specification directed against a
                                                                                                                                                                                                                                                                                                                                                                         17-SEP-1997;
09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
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                                                                               Disclosure; Page 49; 120pp; English.
                                                                                                                                      vasoconstriction
                                                                                                                                                              New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                WPI; 1999-229400/19
                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27 BP; 4 A; 4 C; 8 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTTGAGTTTGCTAGCTCTTGG
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                                                                                                                                                                                                                                                                                                                           EAST CAROLINA
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98US-00093972.
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     n describes
at least 2
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
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  mRNAs selected from target
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Pred. No.
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  (AAX52869-X55271)
genes, coding and
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AAA34088/c
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Best Local S
Matches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastasses, a well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; infilammation; allergy; allergic disease; bronchoconstriction; inhibitor; antianflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction, asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of
                                                                                  New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                          24-FEB-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human adenosine receptor related polynucleotide SEQ ID NO:1777.
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                                                                                                                                                                WPI; 2000-205971/18.
                                                                                                                                                                                                                                                                             03-AUG-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cancer;
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                                                                                                                                                                                                                                        (UYEC-) UNIV EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     leukaemia; lymphoma; carcinoma; metastasis; ss.
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100.0%; Pred. No
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Disclosure;

Page 486; 1343pp; English

The present invention describes a new composition comprising an antisense

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CC incleic acids involved in bronchoconstriction, allergies, and/or cinflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are cuseful for the treatment of diseases associated with inflammation, cinpaired airways, including lung diseases and diseases whose secondary ceffects afflict the lungs of a subject. They can be used for treating ce.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, cinpaded respiration, respiratory distress syndrome, pain, cystic cinpeded respiration, respiratory distress syndrome, pain, cystic cinpeded respiration, respiratory distress syndrome, pain, cystic cinpaded respiration, emphysema, chronic obstructive carcinomas, and cancers which may metastasise to the lungs, including construction and cancer. The reduction of the adenosine content of the createst and prostate cancer. The reduction of the adenosine receptors causing conchoconstriction and inflammation. AAA32313 to AAA35312 represent the cultipade control of the control in the sequence of the present conceptoriously named sequences. SEQ ID NO:1 to 185, but the sequences differ content of the present in the sequences given in the disclosure of the present invention do not match constraint the corresponding SEQ ID NO: sequences given in the sequence constraint invention and match constraints.
   Sequence
                                                                                              up with their corresponding SEQ ID NO: sequences given in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oligonucleotide (ON) with low adenosine (up to 15%), which targets
                                                               listing
   68
   B₽;
   25
A.
   20 C; 25
   G; 18 T;
0 U; 1 Other;
                                                                                              sequence
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밁 á Matches Query Match Best Local 61 17 l Similarity 22; Conserv ATTTGAGTTTGCTAGCTCTTGG ATTTGAGTTTGCTAGCTCTTGG Conservative 100.0%; 5.5%; 0; Score 22; Pred. No. 40 38 Mismatches DB 3; 0 Length 89; Indels 0 Gaps

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Search completed: August Job time: 269.467 secs æ 2005, 16:37:39

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Total number of hits satisfying chosen parameters:
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   1202784 seqs,
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/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
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/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
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/cgn2_6/ptodata/1/ina/backfiles1.seq:*
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   GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
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US-09-451-527-85
US-09-322-409-87
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US-09-23-655-1236
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APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
ITILE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 83
LENGTH: 402
TYPE: DNA
COGANISM: Canis familiaris
US-09-322-409-83
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                                                                      GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
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                                                                                                                                      CAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACTTGAAGAACCAAACTGCCCAC
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                                                    GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
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PCT-US94-10957-16
US-09-949-016-13968
US-09-949-016-6405
US-09-949-016-74518
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Score 402; DB 4; I Pred. No. 2.3e-193; ; Mismatches 0;

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APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Yang, Shumin

APPLICANT: Wonderling, Ramani S.

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

PILE REFERENCE: IM-2-C1

CURRENT APPLICATION NUMBER: US/09/322,409

CURRENT FILING DATE: 1999-05-28

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER APPLICATION NUMBER: 50/087,306

EARLIER APPLICATION NUMBER: 50/087,306
                                           RESULT 3
US-09-451-527-83
Sequence 83, Application US/09451527
Patent No. 6482403
GENERAL INFORMATION:
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; ORGANISM: Canis familiaris
US-09-322-409-84
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GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew
APPLICANT: Wonderling, Rama
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Patent No. 6471957
GENERAL INFORMATION:
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Best Local Similarity
Matches 402; Conserv
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNO
TITLE OF INVENTION: ACID MOLECULES, AND USES
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1999-05-29
UNMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 84
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US-09-451-527-84/c
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Best Local
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ORGANISM: Canis familiaris
-09-451-527-83
LENGTH:
TYPE: DN
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Pred. No. 2.3e-193;
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; LOCATION: (29)..(430)
US-09-322-409-80
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US-09-451-527-84
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Patent No.
                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 80
                                                                                                                                   Matches
                                                                                                                                                  Query Match
Best Local Similarity
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                                                                                            LENGTH: 610
TYPE: DNA
ORGANISM: Canis :
FEATURE:
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o. 6471957
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Similarity 100.0%;
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Pred. No. 2.3e-193;
D; Mismatches 0; Indels
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Pred. No. 2.3e-193;
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; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-322-409-82
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Ureitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: ACID MOLECULES, AND IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 82
SEQ ID NO 82
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                                                                                GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
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Pred. No. 2.3e-193;
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LENGTH: 610
TYPE: DNA
CORGANISM: Canis familiaris
FEATURE:
NAMEKKEY: CDS
LOCATION: (29)..(430)
US-09-451-527-80
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APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Yang, Shumin

APPLICANT: Wonderling, Ramani S.

ITILE OF INVENTION: CANIME AND FELINE IMMUNOREGULATORY I

TITLE OF INVENTION: CANIME AND FELINE IMMUNOREGULATORY I

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/09/451,527

CURRENT FILING DATE: 1999-12-01

BARLIER APPLICATION NUMBER: 09/322,409

EARLIER FILING DATE: 1999-05-28

EARLIER FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOFTWARE: Patentin Ver. 2.0
RESULT 8
US-09-451-527-82/c
; Sequence 82, Application
; Patent No. 6482403
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US-09-451-527-80
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Best Local Similarity
Matches 402; Conserv
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                        US/09451527
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APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Monderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2

CURRENT STLING DATE: 1999-12-01

CURRENT APPLICATION NUMBER: US/09/451,527

CURRENT APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 60/87,306

EARLIER APPLICATION NUMBER: 60/87,306

EARLIER FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOFTWARE: PATENTING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOFTWARE: PATENTING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOFTWARE: PATENTIN Ver. 2.0
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; ORGANISM: Canis familiaris
US-09-451-527-82
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-371-615A-1
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US-09-371-615A-1
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                                                                                                                                         Sequence 1, Application US/09371615A
PAtent No. 6537781
GENERAL INFORMATION:
APPLICANT: IDEXX LABORATORIES
TITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
TITLE OF INVENTION: CANINE INTERLEUKIN 5
FILE REFERENCE: 036040017700US00
CURRENT APPLICATION NUMBER: US/09/371,615A
CURRENT FILING DATE: 1999-08-10
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Best Local Similarity
Matches 402; Conserv
                                                                              NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 1
                                                        LENGTH: 405
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                                                                                                      Windows Version
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RESULT 10
US-09-322-409-85
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; NAME/KEY: CDS
; LOCATION: (1)..(345)
US-09-322-409-85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
APPLICANT: WONDION: CAUINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
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Best Local Similarity
Matches 393; Conser
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LENGTH: 345
                                                                                                                                                                                    Matches
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Best Local (
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NUMBER OF SEQ ID NOS: 154
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Canis familiaris
                                                                                                                                                                                                         Local Similarity
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                                                                                                                                                                         85.8%; 500
100.0%; Pre
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                                                                                                                                                                              Score 345; DB 4; Le
; Pred. No. 1.5e-164;
                                                                                                                                                                                                                      Length 345;
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RESULT 12
US-09-451-527-85
; Sequence 85, Ap
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; ORGANISM: Canis familiaris
US-09-322-409-87
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US-09-322-409-87/c
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SEQ ID NO 87
LENGTH: 345
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Best Local Similarity 100.0%;
Matches 345; Conservative 0
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GENERAL INFORMATION:
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APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1

CURRENT APPLICATION NUMBER: US/09/322,409

CURRENT FILING DATE: 1999-05-28

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER APPLICATION NUMBER: 60/087,306
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
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                                                                                                                                                                                    CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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  Application US/09451527
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; Pred. No. 1.5e-164;
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226

286

106

46

166

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; LENGTH: 345
; TYPE: DNA
; ORGANISM: Canis familiaris
; FEATURE:
; NAMS/KEY: CDS
; LOCATION: (1)...(345)
US-09-451-527-85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SEC IT NO SES
                                                                                                                                                                                                                                                                                                                                                                                RESULT 13
US-09-451-527-87/c
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Best Local Similarity
Matches 345; Conserv
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APPLICANT: Sim, Gek Kee
APPLICANT: Drettz, Matthew J.
APPLICANT: Drettz, Matthew J.
APPLICANT: Drettz, Matthew J.
APPLICANT: Mondering, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
BARLIER APPLICATION NUMBER: 09/322,409
BARLIER APPLICATION NUMBER: 60/087,306
BARLIER APPLICATION NUMBER: 60/087,306
BARLIER APPLICATION NUMBER: 60/087,306
BARLIER FILING DATE: 1998-05-29
                                                                                                                                                                                                                                                                                                              INFORMATION:
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100.0%; Pred. No. 1.5e-164;
Live 0; Mismatches 0;
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; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: PATENTIN VET. 2.0
; SEQ ID NO 87
; LENGTH: 345
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-87
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Best Local Similarity
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                                                                                                                                                          238 CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAAAGAACACATAGAG
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                                                                                                                                                                                                                                                                                                                        345 TTTGCTGTAGAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
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 CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                            CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                                               CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                                                                                                                            CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                                                                                            CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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Pred. No. 1.5e-164;
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US-08-434-503-41
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Patent No. 5616490
GENERAL INFORMATION:
APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
TITLE OF INVENTION: DISEASE
                                                              CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: US 08/008,8
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
APPLICATION DECEMber 7, 1992
                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                              STREET: 011
CITY: Los Angeles
STATE: California
                                                    FILING DATE: December 7, ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 5
            NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,3
                                                                                                                                                                                            APPLICATION NUMBER: US/08/434,503
FILING DATE: 04-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                              90017

    Application US/08434503
5616490

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611 West Sixth
NUMBER:
                                                                                                                                    US 08/008,895
              32,327
                                                                                                                                                                                                                                                                                                                                                                                                                                           Street
200/276
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; LENGTH: 47 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
US-08-466-852-2/c
Search completed: August 8, 2005, 13:43:36 Job time: 82.8667 secs
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 27
TYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/08466852
Patent No. 5681936
GENERAL INFORMATION:
                                                                                                                                              Query Match 5.5%; Score 22; DB 1; Length 47; Best Local Similarity 100.0%; Pred. No. 0.33; Matches 22; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.5%; Score 22; DB Best Local Similarity 54.5%; Pred. No. 0.3: Matches 12; Conservative 10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM: System 7.0.1
SOFTWARE: MICROSOFT WORD 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,852
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: PATZEY, CUITCHS
REGISTRATION NUMBER: 33,752
REGISTRATION NUMBER: 1915IIA
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (908)594-3199
TELEPAX: (908)594-4720
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 in, 1.4kb
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Merck & Co.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Rahway
STATE: New J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (213) 955-0440
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                                                                         29 ATTTGAGTTTGCTAGCTCTTGG 8
                                                                                                            17 ATTIGAGTTTGCTAGCTCTTGG 38
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07065-0907
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     126 East Lincoln Avenue
                                                                                                                                                                                                                                         DNA (genomic)
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0.32;
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Minimum DB seq
Maximum DB seq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
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Pending Patents NA New:*

1: /cgn2-6/ptodata/1/pna/PCT_NEW_COMB.seq2:*

2: /cgn2-6/ptodata/1/pna/USO6_NEW_COMB.seq2:*

3: /cgn2-6/ptodata/1/pna/USO6_NEW_COMB.seq2:*

4: /cgn2-6/ptodata/1/pna/USO9_NEW_COMB.seq:*

5: /cgn2-6/ptodata/1/pna/USO9_NEW_COMB.seq:*

6: /cgn2-6/ptodata/1/pna/USO9_NEW_COMB.seq:*

7: /cgn2-6/ptodata/1/pna/USO9_NEW_COMB.seq:*

9: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq1:*

9: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq1:*

10: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq1:*

11: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq2:*

12: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq3:*

12: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq4:*

13: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq5:*

14: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq6:*

15: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq9:*

16: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq9:*

17: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq9:*

18: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq9:*

19: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq9:*

19: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq3:*

20: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq3:*

21: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq3:*

22: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq3:*

23: /cgn2-6/ptodata/1/pna/USIO_NEW_COMB.seq3:*

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length: 2000000000
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

10 9 8	c 76	വ	0 21	Result No.
22 22 22	345 345	402 402	402	Score
10.0 5.5 5.5	85.8 85.8	100.0	100.0	Query Match
405 405 405	345 345	610 610	402	Query Match Length DB
23 23	11	11	"##	
PCT-US05-00517-150 US-60-680-544-25813 US-60-680-473-25813	US-10-916-286A-85 US-10-916-286A-87	PCT-US05-00517-3424 US-10-916-286A-80 US-10-916-286A-82	US-10-916-286A-83 US-10-916-286A-84	ID
Sequence 150, App Sequence 25813, A Sequence 25813, A	Sequence 85, Appl Sequence 87, Appl	Sequence 3424, Ap Sequence 80, Appl Sequence 82, Appl	Sequence 83, Appl Sequence 84, Appl	Description

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S-10-301-480B-434229	-10-301-480-6715	-10-301-480-58160	-10-301-4807	301-480C-43422	ŏ	925-065A-1025	-10-301-480B-57	-10-301	-10-301-480-816	-10-301	-10-301-	3-10-301-480-202868	-10-301-480A-57893	-301	10-301-480C-57893	-480C-57893	-10-939-107-	-10-939-10	-10-939-107-	-10-939-107	-60-659-397-7	-10-916-2	-60-659-397-12	-10-880-101A-	-10	-10-301-480B-9	-10-301-480-12	-10-301-480-59	-10-301-4	10-301-480C-97	-60-675-841-	-60	-10-880-101A	-T0-88-01-
Sequence 434229,		58160	Ce 4		æ	10250	578	578	81627	e 816	Sequence 202869,	Sequence 202868,	e 57893	Sequence 578937,	578938	57893	e 14,	e 12,	e 10,	Φ	e 713	æ	e 1209	Sequence 91, Appl	e 89,	e 9718	e 1	e 5	e 9718	971893	e 243,	e 502,	е 87,	eductice of

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US-10-916-286A-83; Sequence 83, Application US/10916286A
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: INVENTION: CANINE IL-4 IMMUNOREGULATORY PROTEINS AND USES THEREOF
FILE REFERENCE: IM-2-C1-R
CURRENT APPLICATION NUMBER: US/10/916,286A
CURRENT FILING DATE: 2004-08-11
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR PILING DATE: 1998-05-29
NUMBER OF SEO ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEO ID NO 88
                                                                                                                                                                                                   Query Match 100.0%; Score 402; DB 11; Length 402; Best Local Similarity 100.0%; Pred. No. 1.1e-194; Matches 402; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                               LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
                             61 GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCCTTGACACTGCTCCCACTCAT 120
61 GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCACTCAT
                                                                                                1 ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCCTTT
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.
TITLE OF INVENTION: CANNINE IL-4 IMMUNOREGULATORY PROTEINS AND USES THEREOF
FILE REFERENCE: IM-2-C1-R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
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Local Similarity 100.0%;
 361
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                                                  CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                                                                                                                   GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                                                                                             CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                                                                                     CAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTGAAGAACCAAAACTGCCCAC
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 GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 402
                                                                                                GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
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Pred. No. 1.1e-194;
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RESULT 4
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; ORGANISM: Canis familiaris
PCT-US05-00517-3424
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PCT-US05-00517-3424
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TITLE OF INVENTION: METHODS OF USING DATABASES TO CREATE GENE-EXPRESSION MICROARRAYS,
TITLE OF INVENTION: MICROARRAYS CREATED THEREBY, AND USES OF THE MICROARRAYS
FILE REFERENCE: 18525-04130
CURRENT FILING DATE: 2005-01-07
CURRENT FILING DATE: 2005-01-07
PRIOR APPLICATION NUMBER: 60/535,111
PRIOR FILING DATE: 2004-01-08
NUMBER OF SEQ ID NOS: 3859
SOFTWARE: Patentin version 3.3
SEQ ID NO 3424
                                                                                                                                                                                                                               Sequence 80, Application US/10916286A GENERAL INFORMATION:
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                      APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
TITLE OF INVENTION: CANINE IL-4 IMMUNOREGULATORY PROTEINS AND USES THEREOF
FILE REFERENCE: IM-2-C1-R
CURRENT APPLICATION NUMBER: US/10/916,286A
CURRENT FILING DATE: 2004-08-11
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
SOFTWARE:
                  NUMBER OF
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Pred. No. 1.1e-194;
; Mismatches 0;
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; TYPE: DNA
; ORGANISM: Canis familiaris
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (29)..(430)
US-10-916-286A-80
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APPLICANT: Dreitz, Matthew J.
TITLE OF INVENTION: CANINE IL-4 IMMUNOREGULATORY PROTEINS AND FILE REFERENCE: IM-2-C1-R
CURRENT APPLICATION NUMBER: US/10/916,286A
CURRENT FILING DATE: 2004-08-11
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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US-10-916-286A-82/c
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                                                                                                Query Match 100.0%; Score 402; DB 11; Best Local Similarity 100.0%; Pred. No. 1.1e-194; Matches 402; Conservative 0; Mismatches 0;
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Best Local Similarity
                                                                                                                                                                              LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
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100.0%; Pred. No. 1.1e-194;
tive 0; Mismatches 0;
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; NAME/KEY: CDS
; LOCATION: (1)..(345)
US-10-916-286A-85
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US-10-916-286A-85
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GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.

TITLE OF INVENTION: CANINE IL-4 IMMUNOREGULATORY PROTEINS AND USES THEREOF
FILE REFERENCE: IM-2-C1-R
CURRENT APPLICATION NUMBER: US/10/916,286A
CURRENT FILING DATE: 1090-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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Best Local Similarity
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TYPE: DNA
ORGANISM: Canis
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                                                                                            CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG 297
                                                                                                                                                                                                                                                                                      TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGÀCAAAGTTCCTAGACTACCTG
                        CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG 357
                                                                     CACGGGG
                                                                                                                                         CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACACTTGAAGAACCAAACTGCC
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                                                                                                                                                                                                                                                                                                                                                                                           Length 345;
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RESULT 8
PCT-US05-00517-150
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US-10-916-286A-87/c
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        Sequence 150, Application PC/TUS0500517

GENERAL INFORMATION:

APPLICANT: THE OHIO STATE UNIVERSITY

TITLE OF INVENTION: METHODS OF USING DATABASES TO CREATE GENE-EXPRESSION MICROARRAYS,

TITLE OF INVENTION: MICROARRAYS CREATED THEREBY, AND USES OF THE MICROARRAYS

FILE REFERENCE: 18525-04130

CURRENT APPLICATION NUMBER: PCT/US05/00517

CURRENT FILING DATE: 2005-01-07

PRIOR APPLICATION NUMBER: 60/535,111

PRIOR APPLICATION NUMBER: 60/535,111

PRIOR FILING DATE: 2004-01-08

SUPPLIABLE: PATENTIN VERSION 3.3

SEQ ID NO 150

LENGTH: 405

TYPE: CAMPO
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Matches
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SEQ ID NO 87
LENGTH: 345
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APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
TITLE OF INVENTION: CANINE IL-4 IMMUNOREGULATORY PROTEINS
FILE REFERENCE: IM-2-C1-R
CURRENT APPLICATION NUMBER: US/10/916,286A
CURRENT FILING DATE: 2004-08-11
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
RUMBER OF SEQ ID NOS: 154
COMMANDER OF SEQ ID NOS: 154
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TYPE: DNA
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100.0%; Pred. No. 1.6e-165;
tive 0; Mismatches 0;
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                                                ; TYPE: DNA
; ORGANISM: Macaca Mulatta
US-60-680-473-25813
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; ORGANISM: Macaca Mulatta
US-60-680-544-25813
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                                                                APPLICANT: Szak, Suzanne
APPLICANT: Li, Huo
APPLICANT: Li, Huo
APPLICANT: Bandaru, Raj
APPLICANT: Derbel, Maher
TITLE OF INVENTION: Nucleotide Array Containing Polynucleotide Probes Complementary
TITLE OF INVENTION: Fragments of, Cynomolgus Monkey Genes and the Use Thereof
FILE REFERENCE: 2159039000
CURRENT APPLICATION NUMBER: US/60/680,473
CURRENT FILING DATE: 2005-05-13
NUMBER OF SEQ ID NOS: 48714
SOCTWARE: Patent Sequence Analysis Tool Version 1.0
SEQ ID NO 25813
LENGTH: 405
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SOFTWARE: Patent Sequence Analysis Tool Version
SEQ ID NO 25813
LENGTH: 405
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GENERAL INFORMATION:
APPLICANT: Cooper, Matthew
APPLICANT: Kinch, Deborah
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 25813, Application GENERAL INFORMATION:
Query Match
Best Local Similarity
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APPLICANT:
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APPLICANT: Derbel, Maher
TITLE OF INVENTION: Nucleotide Array Containing Polynucleotide Probas Complementary to
TITLE OF INVENTION: Fragments of, Cynomolgus Monkey Genes and the Use Thereof
FILE REFERENCE: 21590290000
CURRENT EPPLICATION NUMBER: US/60/680,544
CURRENT FILING DATE: 2005-05-13
                                                                                                                                                                                                                                                                                                                         APPLICANT: Cooper, Matthew
APPLICANT: Kinch, Deborah
APPLICANT: Rosenberg, Mici
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; Pred. No.
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Pred. No.
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                 Length 405,
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APPLICANT: SCHNEIDER, ARMIN
APPLICANT: KRUEGER, CAROLA
APPLICANT: SCHMER, CLEMENS
APPLICANT: SCHWAB, CIEMENS
APPLICANT: SCHWAB, STEFAN
APPLICANT: MAURER, MAINER
APPLICANT: MAURER, MAINER
APPLICANT: MAURER, NIKOLAUS
TITLE OF INVENTION: METHODS OF TREATING NEUROLOGICAL CONDITIONS WITH HEMATOPOEITIC
TITLE OF INVENTION: GROWTH FACTORS
FILE REFERENCE: 254622US
FILE REFERENCE: 254622US
CURRENT FILING DATE: 2003-06-30
PRIOR APPLICATION NUMBER: US/10/880,101A
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US/10/659,295
PRIOR FILING DATE: 2003-12-31
PRIOR FILING DATE: 2003-09-11
PRIOR APPLICATION NUMBER: US 10/659,295
PRIOR FILING DATE: 2003-09-11
PRIOR APPLICATION NUMBER: US 10/659,295
PRIOR FILING DATE: 2003-09-11
PRIOR APPLICATION NUMBER: US 10/331,755
PRIOR FILING DATE: 2003-12-31
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US-10-880-101A-87
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GENERAL INFORMATI
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APPLICANT: SCHNEIDER, ARMIN
APPLICANT: KRUEGER, CAROLA
APPLICANT: SOMMER, CLEMENS
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NUMBER OF SEQ ID NOS: 94
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APPLICANT: GASSLER, NIKOLAUS
TITLE OF INVENTION: WETHODS OF TREATING NEUROLOGICAL CONDITIONS WITH HEMATOPOEITIC
TITLE OF INVENTION: GROWTH FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 10/331,755
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TYPE: DNA
ORGANISM: Homo sapiens
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SEQ ID NOS: 94
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KRUEGER, CAROLA
SOMMER, CLEMENS
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APPLICANT: Croteau, Pascal
TITLE OF INVENTION: Genemap of the Human Genes Associated with Crohn's Disease
FILE REFERENCE: 59908-5002-PR
CURRENT APPLICATION NUMBER: US/60/675,841
CURRENT FILING DATE: 2005-04-29
NUMBER OF SEQ ID NOS: 10858
SOFTWARE: PatentIn version 3.3
SEQ ID NO 243
LENGTH: 816
TYPE: DNA
ORGANISM: Homo sapiens
US-60-675-841-243
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NUMBER OF SEQ ID NOS: 47859
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 502
LENGTH: 816
TYPE: DNA
ORGANISM: Homo sapiens
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APPLICANT: CHANG, Sheng-Yung
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RESPONSE TO INTERFERON TREATMENT IN F
TITLE OF INVENTION: VIRUS-INFECTED SUBJECTS, METHODS OF I
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APPLICANT: Raelson, John Verne
APPLICANT: Bradley, Walter Edw
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ORGANISM: Homo sapiens
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Bradley, Walter Edward
Paquin, Bruno
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RESULT 15
US-10-301-480C-971893

Sequence 971893, Application US/10301480C

GENERAL INFORMATION:
APPLICANT: Wang, David G.
ITITLE OF INVENTION: Identification and Mapping of Single
ITITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 108827-137
CURRENT FILING DATE: 2002-911-21
PRIOR APPLICATION NUMBER: US/10/301,480C
CURRENT FILING DATE: 2002-98
PRIOR FILING DATE: 2002-08-09
PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 989478
SOPTWARE: FRESESQ for Windows Version 4.0
SEQ ID NO 971893
LENGTH: 994
TYPE: DNA
ORGANISM: Homo sapien
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Search completed: August
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GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
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CE240114 1	CE027208 1	CE687596 1	CE384620 1	CE566794 1	CE101024 (CE144318 (AI645939 r	AZ266075 I	CE255920 I	AA980077 1	AQ677395 1	BX514766 I	CE669822 I	CE553498 1	CE629992 I	CN448219 (AA200961 1	BQ456087 1	BH056804 I	AQ134641 I
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REFERENCE
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                                                                                     Query Match
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                                                                                                                                                                                                                                                                              source
129;
                                                                                                                                                                                                                                                                                                                                                             Department of Eukaryotic
Rockville, MD 20850, USA
Tel: 301-838-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 622)
Kirkness, E.F., Bafna, V., Halpern, A.L., Levy, S., Remington, K., Rusch, D.B., Delcher, A.L., Pop, M., Wang, W., Fraser, C.M. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Canis familiaris (dog)
Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CB331159 622 bp DNA linear GSS 26-SEP-20
tigr-gss-dog-17000333986568 Dog Library Canis familiaris genomic,
                                                                                                                                                                                                                                                                                                                Class: shotgun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The dog genome: survey sequencing and comparative analysis Science 301 (5641), 1898-1903 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Kirkness EF
                                                                                                                                                                                                                                                                                                                                                                                                                                                        14512627
                                                                                                                                                                                                                                                                                                                                                   Fax: 301-838-0208
                                                                                                                                                                                                                                                                                                                                                                                                                    The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Venter, J.C.
                                                                                     Similarity
                                                                    Conservative
                                                                                                                                                                                                                                                                                                                               ekirknes@tigr.org
                                                                                                                                                    /clone_lib="Dog_Library"
/note="Site_1: BstXI; Libraries were prepared from
peripheral blood"
                                                                                                                                                                                                     /organism="Canis familiaris"
/mol_type="genomic DNA"
/strain="Standard Poodle"
/db_xref."taxon:9615"
                                                                                                                                                                                                                                                                                              ocation/Qualifiers
                                                             32.1%; 5c-
100.0%; Pr
                                                                 Score 129; DB 9; Length 622; Pred. No. 4e-57; O; Mismatches O; Indels
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1 (bases 1 to 405)

Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
          Pan troglodytes (chimpanzee)
Pan troglodytes
Pan troglodytes
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
1 (bases 1 to 405)
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Science 302 (5652), 1960-1963 (2003)
1 (bases 1 Clark, A.G.,
                                                                                   AY412021.1 GI:39767986 GSS.
                                                                                                               genomic survey sequence
AY412021
                                                                                                                                       Pan troglodytes IL5 gene,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission Submitted (16-NOV-2003) Celera Genomics, Rockville, MD 20850, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D., and Cargill, M.
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                                                                                                                                                                                                                                                                                                                                                        /gene="IL5"
/locus_tag="HCM4418"
                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="genomic_DN/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Homo sapiens"
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Glanowski, S., Nielson, R.,
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100.0%; Pred. No.
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AL TRANSCRIPT,
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                                                                                                                                        DNA linear GSS 16-DEC-
TRANSCRIPT, partial sequence,
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Thomas, P.,
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Kejariwal, A.,
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                                                                                                                         RS Strausberg, L., Feingold, E.A., Grouse, L.H., Derge, J.G.,

Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsiah, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Petere, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,

Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
2 (bases 1 t
Strausberg, R.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 456)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens cDNA clone IMAGE: 6971770,
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                                                                                  human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BC066281.1
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/db_xref="taxon:9598"
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3.9;
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frame-shift
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Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
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This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
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NIH-MGC Project URL: http://mgc.nci.nih.gov

Contact: MGC help desk

Email: cgapbs-r@mail.nih.gov
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clone distribution: MGC clone distribution information can be found
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Dickson, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tissue Procurement: Narayan Bhat
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                                                                                                                                                                                                                                                                       Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 456)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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CD559532.1 GI:31585600
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AGENCOURT 14497057 NIH MGC 195 Homo
IMAGE:6971772 5', mRNA sequence.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                            Unpublished (1999)
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/db_xref="taxon:9606"
/clone="IMAGE:6971770"
/tissue_type="PCR rescued clones"
/clone_Tib="NIH_MGC_195"
/lab_host="DH10B"
/lab_host="DH10B"
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(Dickson, Mark) mcd@paxil.stanford.edu
M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers
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mol_type="mRNA"
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22; Conserv
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CDNA Library Preparation: Bhat Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) CNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://inage.llnl.gov
Plate: IRBK1 row: g column: 11
                                                                                                                                                                                                                                                                                                                 Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892 Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 456)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CD559686.1 GI:31585754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGENCOURT 14497093 NIH MGC 195 Homo sapiens IMAGE:6971772 3', mRNA sections
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Larity 100.0%;
Conservative
                                                                                                       quality sequence stop: 456.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.data Note: this is a NIH_MGC Library."
/organism="Homo sapiens"
/mol_type="mRNA"
                                                                              Location/Qualifiers
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tissue_type="mixed"
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mol_type="mRNA"
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Pred. No. 3.9;
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DEFINITION
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                                                                                                                                                                                                 Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S., McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S., Willalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahey, J., Helton, B., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J. W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Schmerth, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
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   Submitted (03-FEB-2004) Gene Collection (MGC),
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1 (bases 1 to 458)
                                                                                                             Strausberg, R
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                                                                       Direct Submission
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                                                                                                                                               (bases 1 to 458)
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Bapiene cDNA clone IMAGE:6971768, containing frame-shift
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/tlissue_type="mixed"
/tlissue_type="mixed"
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/lab_host="mybe="mixed"
/lab_host="mybe="mixed"
/lab_host="mybe="mixed"
/lab_host="mybector: pNR-Dual; Site_1: loxP-SalI; Site_2:
/note="Wector: promers to contain the complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is cDNA derived from NCBI's RefSeq). Template for PCR is cDNA derived from BO Boosciences/Clontech and Washington University).
/note="Wector: product are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
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Pred. No.
National Institutes of Health, Mammalian Cancer Genomics Office, National Cancer
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RESULT 7 BC066279

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ACCESSION VERSION KEYWORDS

REFERENCE

AUTHORS

ORGANISM

JOURNAL PUBMED REFERENCE AUTHORS TITLE

TITLE

JOURNAL

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RESULT 8
BC066280
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ORGANISM
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Strausberg, R. L., Feingold, E. A., Grouse, L. H., Derge, J. G.,

Klausner, R. D., Collins, F. S., Wagner, L., Shenmen, C. M., Schuler, G. D.,

Altschul, S. F., Zeeberg, B., Buetow, K. H., Schaefer, C. F., Bhat, N. K.,

Hopkins, R. F., Jordan, H., Moore, T., Max, S. I., Wang, J., Hsiah, F.,

Diatchenko, L., Marusina, K., Farmer, A. A., Rubin, G. M., Hong, L.,

Stapleton, M., Soares, M. B., Bonaldo, M. F., Casavant, T. L.,

Scheet, T. E., Brownstein, M. J., Usdin, T. B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S. S., Loquellano, N. A., Peters, G. J.,

Abramson, R. D., Mullahy, S. J., Bosak, S. A., McEwan, P. J.,

McKernan, K. J., Malek, J. A., Gunaratne, P. H., Richards, S.,

Worley, K. C., Hale, S., Garcia, A. M., Gay, L. J., Hulyk, S. W.,

Villalon, D. K., Muzny, D. M., Sodergren, E. J., Lu, X., Glbbs, R. A.,

Fahey, J., Halton, E., Ketteman, M., Madan, A., Kodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A. C., Shevchenko, Y.,

Bouffard, G.G., Blakesley, R. W., Touchman, J. W., Green, E. D.,

Dickson, M. C., Rodriguez, A. C., Grimwood, J., Schmutz, J., Myers, R. M.,

Butterfield, Y. S., Krzywinski, M. I., Skalska, U., Smailus, D. E.,

Schnerch, A., Schein, J. E., Jones, S. J. and Marra, M. A.
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Tissue procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
CDNA Sequencing by: Sequencing Group at the Stanford Human
CONA Sequencing by: Sequencing Group at the Stanford, when site:

http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiNI at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 15
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 458)
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Contact: MGC help desk
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USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
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/mol_type="mRNA"
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$; Pred. No. 3.9
0; Mismatches
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TITLE
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Series: IRAK Plate: 172 Row: a Column: 16
This clone was selected for first sequencing because it
passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                  AGENCOURT 14496865 NIH MGC 195 Homo IMAGE: 6971769 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22;
                                          On Jun 10, 2003 this sequence version replaced gi:31585603 Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                           1 (bases 1 to 463)
NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Puppublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clone distribution: MGC clone distribution information can be found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Web site: http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
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Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9906"
/clone="IMAGE:6971769"
/tissue_type="PCR rescued c
/clone_tis="NIH MGC 195"
/lab_host="DH10B"
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On Jun 10, 2003 this sequence version replaced gi:31585756. Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892 Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat CDNA Library Preparation: Bhat Laboratory CDNA Library Preparation: Bhat Laboratory CDNA Library Preparation: CDNA Library Preparation: CDNA Library Preparation: The I.M.A. E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can
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plate: IRBK1 row: g column: 08
High quality sequence stop: 463.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                        1 (bases 1 to 467)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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AGENCOURT 14496964 NIH MGC_195 Homo sapiens
IMAGE:6971770 5', mRNA sequence.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/tissue_type="mixed"
/lab_host="DHSA (T1 phage-resistant)"
/lab_host="DHSA (T1 phage-resistant)"
/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-SalI; Site_2:
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is CDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector: Library constructed by Dr.
Narayan Bhat, Barl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, ND 21702). For
information on which gene each clone represents, please
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ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/db_xref="taxon:9606"
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mol_type="mRNA"
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Pred. No. 3.9;
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                                                                                                                                                                                                                                                       1 (bases 1 to 467)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585758.
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
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                                                                                                            Tissue Procurement: Narayan Bhat CDNA Library Preparation: Bhat Laboratory CDNA Library Preparation: Bhat Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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e: IRBK1 row: g column: 07 quality sequence stop: 467.
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//lab host="mblak" (TI phage-resistant)"
//clone_lib="Wilh MGC 195"
//note="Wector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Wector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
loxP-HindIII, Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NOBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Prederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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|mol_type="mRNA"
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tissue_type="mixed"
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100.0%; Pred. No.
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                                                                                                                             National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-remail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: IRBK1 row: 9 column: 10
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470 bp mRNA linear ES'
AGENCOURT 14497029 NIH MGC 195 Homo sapiens cDNA clone
IMAGE:6971771 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 470)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                              High quality sequence start: 14 High quality sequence stop: 470.
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/clone_lib="NIH_MGC 195"
/clone_lib="NIH_MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Vector: poled cyteplasmic primers to contain the complete open reading frame (based on known gene sequences evaluable from NCBI's RefSeg). Template for PCR is cDNA derived from either pooled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please
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ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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organism="Homo sapiens"
                                                       location/Qualifiers
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Pred. No. 3.9;
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                                                                                                                                                                                                                                                                                                                                     Tissue Procurement: Narayan Bhat cDNA Library Preparation: Bhat Laboratory cDNA Library Preparation: Bhat Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be
                                                                                                                                                                             found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: IRBK1 row: g column: 08
High quality sequence start: 16
High quality sequence stop: 473.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 On Jun 10, 2003 this sequence version replaced gi:31585757. Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892 Email: ggapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   473 bp n
AGENCOURT 14496901 NIH MGC 195 Homo
IMAGE: 697176955', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 473)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR-amplified using gene-specific primers to contain the complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is cDNA derived from either pooled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Biosciences/Clontech and Washington University). PCR products are directionally cloned into the loxe sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.data Note: this is a NIH_MGC Library."
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|mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'db_xref="taxon:9606"
'clone="IMAGE:6971771"
'tissue_type="mixed"
'lab_host="DH5A (T1 phage-resistant)"
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                                                xref="taxon:9606"
lone="IMAGE:6971769"
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; Pred. No.
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sapiens cDNA clone
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CD559608
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Best Local Similarity
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High quality sequence start: 107
High quality sequence stop: 353.
Location/Qualifiers
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bloscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: IRBK2 row: g column: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585676
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 477)
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AGENCOURT 14496997 NIH MGC 195 Homo sapiens
IMAGE:6971867 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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/note="Vector: pDNR-Dual; Site 1: loxP-SalI; Site 2:
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeg). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/image/fearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
                                                                                      /organism="Homo sapiens"
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/note="Vector: pDNR-Dual; Site_1: loxp-Sall; Site_2: loxp-HindIII; Clones from this library have been -
PCR-amplified using gene-specific primers to contain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.5%; Score 22; DB 6; 100.0%; Pred. No. 3.9;
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s cDNA clone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       On Jun 10, 2003 this sequence version replaced gi:31585602. Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892 Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat cDNA Library Preparation: Bhat Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: IRBK1 row: g column: 09
High quality sequence stop: 478.
Location/Qualifiers
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Homo sapiens
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1 (Dases 1 to 478)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
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l. 4/8
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/organisme"Homo sapiens"
/db xref="taxon:9606"
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Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Tehnology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please
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ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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REFERENCE AUTHORS TITLE

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RESULT 15 CD559534

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(from BD Biosciences/Clontech and Washington University). PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.data Note: this is a NIH_MGC Library."

ORIGIN

Matches Query Match Best Local 22; Similarity Conservative 5.5%; 100.0%; 0; Mismatches Score 22; Pred. No. DB 6; Length 478; 0 Gaps

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Search completed: August Job time : 1707.67 secs 9, 2005, 00:13:19

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Post-processing: Minimum Match 0%
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Perfect score:
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Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*

2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*

3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2765	222100	122	10 9 8	W 4 10 10	21 0
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ALIGNMENTS

360	301 CAAAAAAAAGGTGTGCAGGAGAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA 360	Q
300	241 GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC	Db
300		Q
240	181 CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC	Db
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180		Db
180	121 CGAACTTGGCTGATAGGCGATGGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC	Q
120	61 GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCCTTGACACTCCTCCCACTCAT	Db
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60	1 ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCCTTT	Db
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0;	<pre>/ Match 100.0%; Score 402; DB 4; Length 402; Local Similarity 100.0%; Pred. No. 7.5e-123; les 402; Conservative 0; Mismatches 0; Indels 0; Gaps</pre>	Query Match Best Local Matches 40
	409-83 409-83 83, Application US/09322409 0. 6471957 INFORMATION: NT: Sim, Gek-Kee NT: Yang, Shumin NT: Wonderling, Ramani S. NT: Wonderling, Ramani S. NT: WONDER: CANINE AND FELINE IMMUN F INVENTION: ACID MOLECULES, AND USE FERENCE: IM-2-C1 APPLICATION NUMBER: US/09/322,409 FILING DATE: 1999-05-28 APPLICATION NUMBER: 60/087,306 FILING DATE: 1998-05-29 OF SEQ ID NOS: 154 E: PatentIn Ver. 2.0 08 30: 402 DNA SM: Canis familiaris SM: Canis familiaris	US-09-322-409-83 ; Sequence 83, A; patent No. 647 ; Patent No. 647 ; GENERAL INFORM ; APPLICANT: Ya APPLICANT: Ya APPLICANT: Wo ; APPLICANT: Wo ; TITLE OF INVE ; TITLE OF INVE ; TITLE OF INVE ; TITLE AFFERENC ; CURRENT APPLI ; CURRENT FILIN ; CURRENT FILIN ; CURRENT FILIN ; EARLIER FILIN ; NUMBER OF SEQ ; SOFTWARE: Pat ; SEQ ID NO 83 ; LENGTH: 402 ; TYPE: DNA ; OGGANISM: Ca US-09-322-409-83

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RESULT 2
US-09-322-409-84/c
; Sequence 84, Application U;
----nt No. 6471957
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APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Yang, Shumin

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY I

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C1

CURRENT APPLICATION NUMBER: US/09/322,409

CURRENT FILING DATE: 1999-05-28

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 154

SOFTMARE: PATENTIN Ver. 2.0

SEQ ID NO 84

LENGTH: 402

TYPE: DNA
; Sequence 83, Application U
; Patent No. 6482403
; GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
; AppliCANT: Decize, Matche
; APPLICANT: Wonderling, Ra
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Dreitz, Matthew Wonderling, Rama
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; Mismatches 0;
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GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Wonderling, Ramani S.

ITITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE OF INVENTION NUMBER: US/09/451,527

CURRENT APPLICATION NUMBER: US/09/451,527

CURRENT APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER FILING DATE: 1999-05-28

EARLIER FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOFTWARE: Patentin Ver: 2.0

SEQ ID NO 84

LENGTH: 402
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US-09-451-527-83
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RESULT 5
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                                                                                                                                                                                                             ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (29)..(430)
US-09-322-409-80
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                                                                                                                                    Query Match
Best Local S
Matches 402
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                                                                                                                                                                                                                                                                                                                         SEQ ID NO 80
LENGTH: 610
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
ITILE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: U$/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
BARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Ver. 2.0
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                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Canis familiaris
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                                                                                                                                  h 100.0%; Score 402; DB 4; Length 6 Similarity 100.0%; Pred. No. 9.4e-123; 02; Conservative 0; Mismatches 0; Indels
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GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCCTTGACACTGCTCTCCACTCAT
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                                                                                                                                                                       DB 4; Length 610;
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TYPE: DNA
; ORGANISM: Canis familiaris
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APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 82
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Best Local
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 CAAAAAAAAGTTGTGCAGGAGAAAGATGGAGAGGACAAAGTTCCTAGACTACCTGCAA
                                                                                                                                                                     CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
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                                                               GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                  GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                                                                        CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC 343
                                                                                                                                                                                                                 CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                                                                                                         GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCCACTCAT
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Conservative 0;
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Pred. No. 9.4e-123;
; Mismatches 0;
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GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Preitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/09/451,527

CURRENT FILING DATE: 1999-12-01

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER FILING DATE: 1999-05-28

EARLIER FILING DATE: 1999-05-28

EARLIER FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOPTMARE: Patentin Ver. 2.0
RESULT 8
US-09-451-527-82/c
; Sequence 82, Application
; Patent No. 6482403
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Patent No. 6482403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 402;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
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LOCATION: (29)..(430)
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100.0%; Pred. No. 9.4e-123;
tive 0; Mismatches 0;
                    US/09451527
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      Sequence 1, Application US/09371615A

Patent No. 6537781

GENERAL INFORMATION:
APPLICANT: IDEXX LABORATORIES
ITITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
ITITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
ITITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
CUNTENT APPLICATION NUMBER: US/09/371,615A
CURRENT APPLICATION NUMBER: US/09/371,615A
CURRENT FILING DATE: 1999-08-10
IUMBER OF SEG ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
LENGTH: 405
TYPE: DNA
ORGANISM: Canis familiaris
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; SEQ ID NO 82
; LENGTH: 610
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-82
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US-09-371-615A-1
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Best Local Similarity
Matches 402; Conserv
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174

NUMBER OF SEQ ID NOS: 174
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ilarity 100.0%; Pred. No. 9.4e-123;
Conservative 0; Mismatches 0;
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240 403 180 463 Gaps

300

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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROFITION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2.C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 85
TYPE: DNA
ORGANISM: Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
US-09-322-409-85
                                                                                                                                                                                                                                              ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(345)
US-09-322-409-85
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Best Local Similarity 99.9
Matches 400; Conservative
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Best Local
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                                                                                                                                                                  85.8%; Score 345; DE larity 100.0%; Pred. No. 5.1 Conservative 0; Mismatches
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99.5%;
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                                                                                                                                                                  Score 345; DB 4; Le
; Pred. No. 5.1e-104;
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Pred. No. 8.6e-122;
0; Mismatches 2;
                                                                                                                                                                                                       Length 345;
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RESULT 12
US-09-451-527-85
; Sequence 85, Ap
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APPLICANT: Wonderling, Ramani S.
FITTLE OF INVENTION: CANINE AND FELINE IMMUNOREG
FITTLE OF INVENTION: ACID MOLECULES, AND USES TH
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
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; ORGANISM: Canis familiaris
US-09-322-409-87
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US-09-322-409-87/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 87, Application US/09322409 Patent No. 6471957 GENERAL INFORMATION:
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Best Local (
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Local Similarity 100.0%; F
hes 345; Conservative 0;
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                                                                                                                                                                                               CGCCAAAAAAAAAAGGTGTGCAGGAGAAAAGATGGAGGAGGTGACAAAGTTCCTAGACTACCTG
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 Application US/09451527
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GENERAL INFORMATION:

APPLICANT: Sim, Gek-kee

APPLICANT: Sim, Gek-kee

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOP

FILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/09/451,527

CURRENT APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER FILING DATE: 1998-05-28

EARLIER FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 85

LENGTH: 345

LENGTH: 34
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Macthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC:
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/887,306
EARLIER APPLICATION NUMBER: 60/887,306
EARLIER APPLICATION NUMBER: 60/887,306
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ORGANISM: Canis familiaris
FEATURE:
NAME/KEY: CDS
LOCATION: (1)...(345)
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100.0%; Pred. No. 5.1e-104;
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; TYPE: DNA
; ORGANISM: Canis
US-09-451-527-87
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; ORGANISM: Homo
US-09-079-839-2
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CURRENT FILING DATE: 1998-05-15
NUMBER OF SEG ID NOS: 2
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 816
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SOFTWARE: PatentIn Ver. 2
SEQ ID NO 87
LENGTH: 345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/09079839 Patent No. 6048726
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Best Local Similarity
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APPLICANT: Karim, Aftab S.
TITLE OF INVENTION: INHIBITION OF BOSINOPHILIC
FILE REFERENCE: 09998/002001
                                                                                                                                                                                                                                                        Local
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                                                                                                     105 CCCACAGAAATTCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCAT
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     CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACTTGAAGAACCAAACTGCCCAC
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                                    CGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCAC
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Pred. No. 5.1e-104;
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Pred. No. 2.2e-81;
0; Mismatches 78
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; TOPOLOGY: linear; ; IMMEDIATE SOURCE; ; LIBRARY: GENBANK; CLONE: 9288309 US-09-023-655-1236
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APPLICATION NUMBER:
PILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0.
TELECOMMUNICATION INFORMATION:
TELEPAN: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1236:
SEQUENCE CHARACTERISTICS:
LENGTH: 816 DASE PAIS
TYPE: nucleic acid
STRANDEDNESS: Single
TOPDICGY: 110-27
                                                                     Query Match
Best Local S
Matches 323
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Patent No. 6607879
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Cocks, Benjamer
APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
APPLICANT: INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE
TITLE OF INVENTION: EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION UMBER: US/09/023,655
FILING DATE: HEREWITH
CLASSIFICATION:
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STREET: 31.
CITY: PALO ALTO
CTATE: CALIFORNIA
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ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
                                                    Local 323;
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Pred. No. 7.6e-81;
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                     GTATTTCTTGGTGTAATAAACACCGAGTGGACACCCGAAAGT 402
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Search completed: August 7, 2005, 18:43:08
Job time: 81.8667 secs

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Minimum
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REFERENCE AUTHORS VERSION KEYWORDS SOURCE ORGANISM RESULT 1 BD211560 LOCUS ACCESSION DEFINITION COMMENT TITLE JOURNAL HESKA CORP OS Canis PN JP 200 PD 04-JUN PF 28-MAY PR 29-MAY PI GEKKEE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis. 1 (bases 1 to 402) Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S. Canine and feline immunoregulatory proteins, nucleic acid and method of using the same Patent: JP 2002516104-A 66 04-JUN-2002; BD211560.1 GI:33021330 JP 2002516104-A/66. BD211560 Canine and Canis familiaris Canis familiaris (dog) and method D 04-JUN-2002 pp 28-MAY-1999 JP 2000551002 pp 29-MAY-1998 US 60/087306 pp 29-MAY-1999 Canis familiaris (dog) JP 2002516104-A/66 feline immunoregulatory of using the same. 402 bp proteins, nucleic DNA linear PAT 17-JUL-2003 Euteleostomi; Canis. acid molecules molecules

ALIGNMENTS

FEATURES

/organism='Canis familiaris (dog)'.

/organism="Canis familiaris" /mol_type="genomic DNA" /db_xref="taxon:9615" molecules and CC method of FH Key FT source

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Location/Qualifiers

pC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC and feline immunoregulatory proteins, nucleic acid CC

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REFERENCE
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                                                                                                                   C07K14/54,
C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10,
 /organism='Canis
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Pred. No. 1e-100;
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
Canine IL-4 immunoregulatory proteins and uses
Patent: US 6471957-A 83 29-OCT-2002;
                                                                                                                                                                                                                                                                                                                                Unclassified
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/mol_type="genomic DNA"
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 84 29-OCT-2002;
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/mol_type="genomic
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Sim,G--K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney II-13 immunoregulatory proteins and uses
Patent: US 6482403-A 84 19-NOV-2002;
                                                                                                                            Unknown.
Unclassified.
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Sim.G.-K., Yang.S., Dreitz,M.J. and Wonderling,
Caniney II-13 immunoregulatory proteins and use
Patent: US 6482403-A 83 19-NOV-2002;
Location/Qualifiers
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/organism="unknown"
/mol_type="genomic
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Yang, S., Sellins, K.S., Weber, E. and McCall, C. Canine interleukin-5: molecular characterization of the expression of biologically active recombinant protein referred Cytokine Res. 21 (6), 361-367 (2001)
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Canis familiaris interleukin-5 p
AF331919
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
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Parkway, Ft Collins, CO 80525,
Location/Qualifiers
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                                                                                                                                    29. .433
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PF 28-MAX-1999 JP 2000551002

PR 29-MAY-1998 US 60/087306

PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A6131/7008, A61X38/00, A61X38/21, A61X39/00, A61X39/395, PC A61X39/395, PC C07K14/50, A61X48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535, PC C07K14/56, C07K14/705, C07V14/705, C07V14/56, C07K14/56, C07K14/705, C07V14/705, C07V14/56, C07K14/705, C07V14/705, C07V14/56, C07K14/705, C07V14/705, C0
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JP 2002516104-A/64.
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JP 2002516104-A/64
04-JUN-2002
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/mol_type="genomic DNA"
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Pred. No. 9.8e-101;
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CC method of using the same
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Location/Qualifie
FT source 1.610
PT source /organism='Canis
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Canis familiaris
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                                                                                                                                                                                         R 29-MAY-1998 US 60/087306
I GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING
C12N15/09,A61K31/7088,A61K38/00,A61K38/21,A61K39/00,A61K39/395,
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29-MAY-1998 US 60/0873
                                                                                                                                                                                                                                                         JP 2002516104-A/65
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                Location/Qualifiers
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/organism='Canis familiaris (dog)'.
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1 (bases 1 to 610)

1 (bases 1 to 610)

Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.

Canine II-4 immunoregulatory proteins and uses thereof

Patent: US 6471957-A 80 29-OCT-2002;

Location/Qualifiers
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CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAAATAAAAATCAC 180
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/mol_type="genomic DNA"
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/mol_type="genomic
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 82 29-OCT-2002;
Location/Qualifiers
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m,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
nniney IL-13 immunoregulatory proteins and use
tent: US 6482403-A 82 19-NOV-2002;
Location/Qualifiers
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Guo,H., Lawton,R., Mermer,B. and Alyappa,A.P.
Methods and compositions concerning canine interleukin
Patent: US 6537781-A 1 25-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1 from AR300436
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/mol_type="genomic |
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Canis familiaris
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
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Sequence 1 from Patent WO0111049.
AX083939 GI:14532940
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                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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/mol_type="unassigned DNA"
/db_xref="taxon:9615"
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Aaf23049 Human DNA
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44.4	48.3	48.4	48.9	49.8	50.0	51.3	51.3	51.3	51.3	51.3	51.3	51.3	55.9	57.1	57.6	57.6	62.7	68.6	68.6	68.6	68.6	69.0	69.0	69.0
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ALIGNMENTS

RESULT 1 AAZ55548

14-MAR-2000 (first entry)

Canine interleukin-5 (IL-5) cDNA coding region.

Interleukin-5; IL-5; antibody; canine; inhibitor; immune response; immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.

AAZSS548;

AAZ55548 standard; cDNA; 402

ВP

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Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline FIL-1 3 ligand, canine or feline CD140, canine or feline CD154 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GWCSF), and nucleotides which encode these immunoregulatory proteins. The proteins their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune
                                                                                                                                                       Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease
                                                                                                                             Claim 1h; Page 225; 264pp; English.
                                                                                                                                                                                                P-PSDB; AAY58219.
                                                                                                                                                                                                                WPI; 2000-072623/06.
                                                                                                                                                                                                                                          Sim G,
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Matches 402
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                                                                         29-MAY-1998;
                                                                                                      28-MAY-1999;
                                                                                                                                                                                                 Canis familiaris
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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02; Conservative
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                 Dreitz
                                                                                                                                                                                                                                                                                                                                                              cDNA;
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               Wonderling RS
                                                                                                                                                                                                                                                                                                                                                                ВP
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Pred. No. 3.2e-110;
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Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (II-5). The invention relates to canine II-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD134 (CD40 (CD40 canine Flt-3 ligand), canine or feline CD40, canine or feline CD134 (CD40 (CD40 canine Flt-5) canine II-13, feline interferon-alpha (IFN-alpha) (CD40 canine Flt-5) canine II-13, feline interferon-alpha (IFN-alpha) (CD40 canine GA40 canine II-14), feline interferon-alpha (IFN-alpha) (CD40 canine GA40 canine II-13, feline interferon-alpha (IFN-alpha) (CD40 canine GA40 canine II-14), feline interferon-alpha (IFN-alpha) (CD40 canine GA40 canine II-14), feline interferon-alpha (IFN-alpha) (CD40 canine GA40 canine II-14), feline interferon-and interferon-and inhibitors may be used to treat autoimmune or infectious diseases including (CD40 canine) (CD
Sequence 402 BP; 101 A; 93 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1h;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acids encoding immunoregulatory proteins from cats or useful for treating or preventing e.g. tumors or autoimmune di
                                                                              targetting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000-072623/06.
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79
G; 129
T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease.
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u; o

Other;

Ś Ş 밁 Ş 밁 Ş 밁 밁 á 밁 S 문 S Query Match Best Local Similarity Matches 402; 361 102 301 162 241 222 181 121 342 402 42 61 GCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT 1 ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCCTTT GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC CAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACTTGAAGAACCAAACTGCCCAC CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAAATAAAATCAC GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC Conservative 100.0%; Score 402; DB 3; 100.0%; Pred. No. 3.2e-110; 0 Mismatches Length 0 Gaps 43 103 163 180 120 343

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RESULT 3
AAZ55546
ID AAZ5
XX
AC AAZ5
XX
AC AAZ5
XX
AC AAZ5
XX
AC CAni
XX
DE Cani
XX
Inte
                     Canine interleukin-5 (IL-5) cDNA.
                                          14-MAR-2000
                                                              AAZ55546;
                                                                                   AAZ55546 standard; cDNA;
                                          (first
 IL-5;
                                          entry)
antibody; canine;
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response,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD544 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) CC ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and CC nucleotides which encode these immunoregulatory proteins. The proteins, CC used as vaccines for therapeutic or prophylactic regulation of an immune CC response in animals (particularly cats, dogs, horses and humans). They CC may be used to treat autoimmune or infectious diseases including CC allergies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can CC also be used for the recombinant production of a protein, while CC nucleotide fragments are useful as probes, as amplification primers and CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators and the proteins and to screen for modulators.
                                                                                                                                                                                                                                                                                                                                             Matches 402; Conservative
                                                                                                                                                                                                                                                                                                                                                                              Query Match
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P-PSDB; AAY58219.
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                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 610
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                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 activity, while the antibodies may be used in detection,
                                                                                                                                       149
269
                            241
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                                                                                                                                                             CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAATCAC
                  GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                    CAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                  CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                                       CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                                                                                           ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                BP; 202 A; 114 C; 139 G; 155 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                              100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer; autoimmune disease; vaccine;
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                                                                                                                                                                                                                                                                                                                                                              Score 402; DB 3;
Pred. No. 3.7e-110;
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328
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RESULT 4
AAZ55547/c
ID AAZ555
XX AAZ555
XX AAZ555
XX Interl
XX Interl
XX Interl
XX Immuno
XX Immuno
XX Canis
XX YFT CDS
FT CDS
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                                                                                     Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (II-5). The invention relates to canine II-4, canine or CC feline Plt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 (Igand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and cnucleotides which encode these immunoregulatory proteins. The proteins their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune cresponse in animals (particularly cats, dogs, horses and humans). They can be used to treat autoimmune or infectious diseases including CC alponse in animals (particularly cats, dogs, horses and humans). They can be used for the recombinant production of a protein, and to increase the cresponse from a co-administered antigen. The nucleotide sequences can conscience of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yang S, Dreitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acids encoding immunoregulatory proteins from cats or dogs, for treating or preventing e.g. tumors or autoimmune disease.
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Best Local Similarity

100.0%;

Score 402; DB 3; Pred. No. 3.7e-110;

Length 610

Query Match

Sequence 610

B₽;

155 A; 139 C; 114 G; 202

T; 0 U; 0 Other;

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RESULT 5
AAF743000
ID 743000
ID 743000
ID 7404-M
XX AAF7
XX DOG;
XX DOG;
XX Infil
XX VO20
PM WO20
PM WO20
PM 15-F
XX U09-A
XX U1DE
XX 
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                                             The present invention provides the protein and coding sequences of canine interleukin-5 (IL-5) protein. This can be used to treat allel cancer and inflammatory reactions in dogs. The present sequence is version of the IL-5 coding sequence shown in the specification
                                                                                                                                                                                                        Novel canine interleukin 5 polynucleotide and polypeptides are used i generating antibodies which are useful in treating allergies in dogs
    Sequence
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Best Local S
                                                            Claim
                                                                            Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease.
                                                                                                                                                                                   29-MAY-1998;
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Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and

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RESULT 7
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Best Local Similarity
Matches 345; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including allergies, tumours, inflammation and graft rejection, and to increase the response from a co-administered antigen. The nucleotide sequences can also be used for the recombinant production of a protein, while nucleotide fragments are useful as probes, as amplification primers and as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
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    WPI; 2000-072623/06
                                       Sim G,
                                                                                                                       29-MAY-1998;
                                                                                                                                                           28-MAY-1999;
                                                                                                                                                                                                                                                                                    Canis familiaris.
                                                                                                                                                                                                                                                                                                                                           Interleukin-5; IL-5; antibody; canine; inhibitor; immune response;
                                                                                                                                                                                                                                                                                                                                                                                       Canine mature
                                                                                                                                                                                                                                                                                                                                                                                                                               14-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ55551 standard; cDNA; 345 BP
                                                                                                                                                                                                                                                                                                                          immunoregulation;
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                                       Yang S, Dreitz MJ,
                                                                               HESKA
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                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                       interleukin-5 (IL-5)
                                                                                 CORP
                                                                                                                                                               99WO-US011942
                                                                                                                       98US-0087306P
                                                                                                                                                                                                                                                                                                                            tumour; cancer; autoimmune disease; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85.8%;
100.0%;
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; Pred. No. 3.8e-93;
                                         Wonderling
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                                         RS;
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CC Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (II-5). The invention relates to canine II-4, canine or CC feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 (Igand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and CC nucleotides which encode these immunoregulatory proteins. The proteins, CC their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC response in animals (particularly cats, dogs, horses and humans). They CC may be used to treat autoimmune or infectious diseases including CC allergies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can CC also be used for the recombinant production of a protein, while CC nucleotide fragments are useful as probes, as amplification primers and CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators CC farterting while the antibodies may be used in detection, and in drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1h; Page 228; 264pp; English..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   c acids encoding immunoregulatory proteins from cats or dogs, for treating or preventing e.g. tumors or autoimmune disease
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Sequence 345 BP; 79 A; 78 C; 68 G; 120 T; 0 U; 0 Other;

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Best Local Similarity
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                     CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 402
                                                                                                                                                             CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                                                                                                                             CACCAACTGTGCATTAAAGAAGTTTTTCAGGGGTATAGACACATTGAAGAACCAAACTGCC
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                                                                                                                                                                                                                                                                                                                                           TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCTCCACT 117
CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 1
                                                                                            CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                                                             CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                                                                                             CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                             CGCCAAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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Pred. No. 3.8e-93;
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CN1231339-A
                Sus scrofa.
                                Pig; vaccine; cysticercosis; protective antigen; tenial cysticercus; gamma interferon; IFN-gamma;
                                                       Porcine IL-5
                                                                       31-MAR-2000
                                                                                                       AAZ44265 standard; DNA;
                                                        DNA.
                                                                       (first entry)
                                                                                                       838
                                cC1; cC3; cC4;
interleukin 5;
                                IL-5; 88
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RESULT 9
AAT50755
ID AAT5
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AC AAT5
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes a novel nucleic acid vaccine for preventing and curing human and pork cysticercosis. The invention involves the formation of a eukaryotic expression plasmid from fusion transcript expression unit consisting of three protective antigen genes (cCl, cCl and cC4) of pig tenial cysticercus and coexpression unit of related cell factor gamma interferon (IFN-gamma) and pork interleukin 5 (II-5)] genes. The production and purification process of said nucleic acid vaccine is simple and convenient, the physical and chemical properties of the vaccine are stable, and the vaccine is easy to store and transport, and possesses effective immunological protective function for human and pig cysticercosis. This sequence represents the pig II-5 gene used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sun S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-OCT-1999.
 17-OCT-2003
24-SEP-1997
                                             AAT50755;
                                                                           AAT50755 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 838 BP; 280 A; 148 C; 171 G; 239 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UNIV NO 2 MILITARY MEDICAL
                                                                                                                                                                                                                                                                                                                                                                                                                 CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
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                                                                                                                                                                                                                                                                                                                                                                  CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACCATTGAAGAACCAAACTGCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTTGGGGGCTGCCTATGTTTTCTGCCTTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTGTACAAAGTCCCATGAATAGGCTGGTGGCAGAGACCTTGGCACTGCTCCACTCAT
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                                                                                                                                                                                                                                                                                                                                     CAACTGTGCATTGAAGAAGTCTTTCAGGGTATAGACACTTAAAGAATCGCACTGTGCCG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the invention
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(revised)
(first entry)
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                                                                           DNA; 520
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91.0%;
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Pred. No. 8.1e-93;
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CC livestock (esp. cows and sheep), particularly where the animals are constructed to the animals are tressed, e.g. during transport. IL-5 and IL-12 can also be used as compared to the animals are constructed to the animals are useful in enzyme immunoassays for rapid diagnosis of the antibodies are useful in enzyme immunoassays for rapid diagnosis of the antibodies are useful in enzyme immunoassays for rapid diagnosis of the antibodies are useful in enzyme immunoassays for rapid diagnosis of the infection. The interleukins are immunopotentiators, especially IL-5 componers growth of early haematopoietic progenitor cells and generation of cytotoxic cells from thymocytes, also it stimulates production and conducted production of gamma-interferon by, and proliferation of Ti-12 collinary production and secretic constructs can also be used for in vitro production of IL-5 or egenetic constructs can also be used for in vitro production of IL-5 or collinary collinary collinary collinary.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         livestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer; immunosuppression; allergy; reproductive system; growth; early maturity; antibody; diagnosis; immunopotentiator; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               exon
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                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-JUN-1995;
27-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-JUN-1996;
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                                                                                                                                                                                                                                                                                            The sequences given in AAT50755-56 encode ovine interleukin-5 (IL-
Ovine IL-5 or IL-12 are used to treat and/or prevent infections in
                                                                                                                                                                                                                                                                                                                                             Claim 6; Page 39-40; 78pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CSIR ) COMMONWEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                               1997-077528/07.
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95AU-00006244.
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Query Match Best Local Similarity

78.7**%;** 86.8**%**; A; 99 C;

Score 316.2; DB 2; Pred. No. 1.9e-84;

Length 520;

124 G; 131 T; 0 U; 0 Other;

Sequence

520 BP;

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AATSOUT 10
AATSO756
ID AATSO
XX AATSO
XX 17-OC
DT 17-OC
DT 24-SE
XX Cytok
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                                                Claim 6; Page 41-42; 78pp; English
                                                                                                Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock
                                                                                                                                                                                           WPI; 1997-077528/07.
P-PSDB; AAW08479.
                                                                                                                                                                                                                                                                        Seow H,
                                                                                                                                                                                                                                                                                                                                                                                 14-JUN-1995;
27-OCT-1995;
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24-SEP-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC Ovine II-5 or II-12 are used to treat and/or prevent infections in CC livestock (esp. cows and sheep), particularly where the animals are Stressed, e.g. during transport. II-5 and II-12 can also be used as CC adjuvants in vaccines for veterinary use (partic. weakly immunogenic cc subunit or synthetic peptide vaccines). They may also be used to treat CC cancer, immunosuppression and allergy, to enhance/suppress the CC reproductive system and to promote growth or early maturity. Optionally CC interleukin can be delivered from constructs or delivery cells and CC antibodies are useful in enzyme immunoassays for rapid diagnosis of CC infection. The interleukins are immunopotentiators, especially II-5 promotes growth of early haematopoietic progenitor cells and generation of cytotoxic cells from thymocytes, also it stimulates production and CC induces production of gamma-interferon by, and proliferation of. T and NK CC cells and increases the (non-)specific cytolytic lymphocyte response. The CC genetic constructs can also be used for in vitro production of II-5 or cc 12. (Updated on 17-OCT-2003 to standardise OS field)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 399 BP; 130 A; 77 C; 93 G; 99 T; 0 U; 0 Other;
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                                                AGGAAGTGTGGAGGAGAAAGATGGAGAGTGAAACAATTCCTCGACTACCTGCAAGTTTTC
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86.8%;
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Pred. No. 3.7e-83;
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Canine interleukin-5 coding sequence
                          WO200111049-A2
                                                    Dog; interleukin-5; IL-5; allergy; cancer; gene therapy; inflammatory reaction; ds.
                                                                                     04-MAY-2001
                                                                                                              AAF74306 standard; DNA;
                                                                                    (first entry)
                                                                                                              393
                                                                                                              В₽
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The sequences given in AAT50755-56 encode ovine interleukin-5 (IL-5)

09-AUG-2000; 2000WO-US021651.

15-FEB-2001

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ARASULT 12
AAA34857
ID AAA34
XX AAA34
XX AAA34
XX AAA34
DT 28-JU
DT 28-JU
DX Human
XX Human
XX Human
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KW Ploss
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Best Local Similarity
Matches 288; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one
                                                                                                                                                                                                                                                               Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothicate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel canine interleukin 5 polynucleotide and polypeptides are used f generating antibodies which are useful in treating allergies in dogs.
                               03-AUG-1999;
                                                                                                                                     WO200009525-A2
                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human adenosine receptor related polynucleotide SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA34857 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               version of the IL-5 coding sequence shown in the specification
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-AUG-1999;
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                                                                                                                                                                                                                                                 leukaemia; lymphoma; carcinoma; metastasis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IDEXX LAB
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                               99WO-US017712.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mermer B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
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99.7%;
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Pred. No. 7.6e-76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              86 G; 97 T;
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Sequence

816 BP;

277

0 Other;

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CC effects affligt the lungs of a subject. They can be used for treating CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, CC impeded respiration, respiratory distress syndrome, pain, cystic CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive CC glumonary disease (COPD), and cancers such as leukaemias, lymphomas, CC carcinomas, and cancers which may metestasise to the lungs, including CC breast and prostate cancer. The reduction of the adenosine content of the CC ons reduces side effects. The A-containing ONs break down with the CC release of deoxyadenosine which activates adenosine receptors causing CC bronchoconstriction and inflammation. AAA33313 to AAA53312 represent the CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA3223 to CC AAA3392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match CC up with their corresponding SEQ ID NO: sequences given in the sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstruction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary impaired airways, including lung disease and diseases whose secondary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 716; 1343pp; English
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Best Local
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GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                                                                                                                                                                                 CGAACTTGGCTGATAGGCGATGGGAAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                                                                                                                  GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
                                            CAAAAAAAAAAGTGTGGAGAAGAAGACGGAGAGTAAACCAATTCCTAGACTACCTGCAA
                                                                    CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
                                                                                                   GGGGGTACTGTGGAAAGACTATTCAAAAACTTGTCCTTAATAAAGAAATACATTGACGGC
                                                                                                                            GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                                                                                          CAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAA
                                                                                                                                                                                    CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                                                                                                                                                CGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCAC
                                                                                                                                                                                                                                                                        CCCACAGAAATTCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCAT
                                                                                                                                                                                                                                                                                                                              ATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTTGGAGCTGCCTACGTGTATGCCATC 104
                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                              69.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                Score 277.2;
Pred. No. 1.2
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78;
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405

GAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT 446

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RESULT 13
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence represents the human interleukin-5 (IL-5) encoding nucleotide sequence. Interleukin-5 is involved in cosinophilic inflammation and inflammatory disorders. The present invention relates to an IL-5 antisense oligonucleotide (see AAA13337) which inhibits the expression of IL-5. The antisense oligonucleotide has at least one non-natural internucleoside linkage. The oligonucleotide is able to inhibit IL-5 secretion in a dose dependent manner, and is useful for inhibiting IL-5 expression and therefore treating inflammatory diseases, asthma, allergic rhinitis, allergic conjunctivitis and inflammatory skin diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide comprising non-natural internucleoside linkage, useful for inhibiting interleukin-5 expression and treating inflammatory diseases, asthma, allergic rhinitis, allergic conjunctivitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; interleukin-5; IL-5; inflammatory disease; asthma; eczema; antisense oligonucleotide; allergic rhinitis; inflammatory skin disease; allergic conjunctivitis; inhibitor; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-APR-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA13338 standard; cDNA; 816
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   eczema
                                                                                                                                             CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                                        CCCACAGAAATTCCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCAT
                                                                                                                                                                                                                                                        GCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGACTCCACTCAT
                                                                                                                                                                                                                                                                                                                                                                      ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            816 BP;
                                                    CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC 240
                                                                                                                                                                                                                                                                                                                                   ATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTGGAGCTGCCTACGTGTATGCCATC
CAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAA
                                                                                                           CGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Karim AS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; 164 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 277.2;
Pred. No. 1.:
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ches 78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF20979
                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human low adenosine antisense oligonucleotide related sequence #2546.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAGAACACATAGAGCGC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGGGTACTGTGGAAAGACTATTCAAAAAACTTGTCCTTAATAAAGAAATACATTGACGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypertension; emphysema; pulmonary transplantation rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            816
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Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers respiratory obstructions.

WPI; 2000-679539/66

06-APR-1999;

99US-0127958P

(UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.

24-MAR-2000; 2000WO-US008020

WO200062736-A2

26-OCT-2000

Disclosure; Page 788; 1592pp; English

immunosuppressive, antiathmatic, hypotensive and cytostatic activities. The antisense oligonuclectides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with hug/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system peptide The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,

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ADG33104
ID ADG33
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Best Local S
Matches 324
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                                                                                                                                                                                                                                                                                                            systemic lupus erythematosis; rheumatoid arthritis; cholecystitis; Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondylitis; ulcerative colitis; primary sclerosing cholangitis; appendicitis;
                                                                                                                                                                                                                                                                                                                                                                           human; ds; autoimmune; chronic inflammatory disease; SLB; systemic lupus erythematosis; rhaumaroid arthritic. ----
                                  24-APR-2003; 2003WO-US013015
                                                                                                  06-NOV-2003
                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                      diverticulitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADG33104 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 816 BP; 277
                                                                                                                                                              WO2003090694-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA differentially expressed in patients with SLE SeqID428.
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                                                                                                                                                                                                                                                                                      primary biliary sclerosis.
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Pred. No. 1.2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention relates to novel methods for diagnosing and monitoring cautoimmune and chronic inflammatory diseases. Specifically, it refers to the identification of genes that have a clinical utility as diagnostic tools for the management of, in particular, patients with systemic lupus erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the present invention describes a method for determining the levels of multiple differentially expressed genes of a patient, in a concerted manner, in order to achieve an improved diagnostic assay with sensitivity and specificity for the disease in question. As such, these genes are useful for the diagnosis of various other inflammatory disorders including cholecystitis, Sjogren's disease, CREST syndrome, scleroderma, ankylosing spondylitis, ulcerative colitis, primary sclerosis. This polynucleotide is a DNA sequence representing human mRNA that is of the invention appreciation patients with SIE, used in an exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 324; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Diagnosing or monitoring autoimmune and chronic inflammatory diseases, such as rheumatoid arthritis, systemic lupus erythematosus, ulcerative colitis, psoriasis and asthma by detecting the expression level of one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 816 BP; 276 A; 137 C; 165 G; 238 T; 0 U; 0 Other,
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                     GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                                                              CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
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GAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT
                                                                           CAAAAAAAAAAGTGTGGAGAAGAAGAAGACGGAGAGTAAACCAATTCCTAGACTACCTGCAA
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Search completed: August Job time: 270.467 secs æ

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Minimum DB seq length: 0
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1: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*

2: /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*

3: /cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*

4: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*

5: /cgn2_6/ptodata/2/pubpna/USO7_NEW_PUB.seq:*

6: /cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*

6: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*

8: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*

9: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
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                                                                                               7297361 seqs, 3241162794 residues
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Maximum Match 100%
Listing first 45 summaries
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/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIE

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402	402	402	402	402	402	402	Score
100.0	100.0	100.0	100.0	100.0	100.0	100.0	Query Match
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US-10-787-382-7	US-10-262-439-84	US-10-262-439-83	US-10-218-654-84	US-10-218-654-83	US-09-755-633-8	100.0 402 9 US-09-755-633-7	ID
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Sequence 78, Appl Sequence 78, Appl	e 18, 19,	sequence 12, Appl Sequence 14, Appl Sequence 18, Appl	14,12,	21, 2		Sequence 90, Appl Sequence 4, Appli Sequence 87, Appl Sequence 1236, Ap	9, 11, 85,	85, 87,	Sequence 11, Appl Sequence 85, Appl Sequence 87, Appl	9 9 9	88,88	6, At

ALIGNMENTS

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PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FLING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 7
                                                                                 ; LENGTH: 402
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-755-633-7
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US-09-755-633-7
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Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 402; Conservative 0
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APPLICANT:
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CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CALUBE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                              Yang, Shumin
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  Score 402; DB 9; I
Pred. No. 6.4e-115;
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CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
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Patent No. US20020127200A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE:
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                     LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
-09-755-633-8
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APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CAUNE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
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                      CAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
                                                                                          CGAACTTGGCTGATAGGCGATGGGAACCTTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                          GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
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                                                                    CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
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RESULT

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CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOPTWARE: Patentin Ver. 2.0
SEQ ID NO 83
LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
US-10-218-654-83
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US-10-218-654-83
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumi
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Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
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                      GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                                         CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
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                                                                     CAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
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100.0%; Pred. No. 6.4e-11
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US-10-262-439-83
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TYPE: DNA
CORGANISM: Canis familiaris
US-10-218-654-84
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Publication No. US20030099609A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                             Sequence 83, Application US/10262439 Publication No. US20030143196A1
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APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 202-08-13
                                                         APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
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PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver: 2.0
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Pred. No. 6.4e-115;
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PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 402
TYPE: DNA
CRGANISM: Canis familiaris
US-10-262-439-83
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Best Local Similarity
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                      GTATTTCTTGGTGTAATAAACACCGAGTGGACACCCGAAAGT 402
                                                                                                                    CAAAAAAAAGTTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTTCCTAGACTACCTGCAA 360
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GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                             CANANAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAA
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                                                                                                                                                                                                                                      CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC
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US-10-262-439-84/c

US-10-262-439-84/c

Sequence 84, Application US/10262439

Publication No. US20030143196A1

GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Sim, Gek-Kee

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/10/262,439

CURRENT FILING DATE: 1999-12-01

PRIOR APPLICATION NUMBER: US/09/451,527

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 84

LENGTH: 402

TYPE: DNA

ORGANISM: Canis familiaris

US-10-262-439-84

360

300 300 240 240 180

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APPLICANT: Yang, Shumin
APPLICANT: WcCall, Catharine A.
APPLICANT: WcCall, Catharine A.
APPLICANT: WcCall, Calharine A.
ITILE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: U8/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: U8/09/755,633
PRIOR APPLICATION NUMBER: U8/09/755,633
PRIOR APPLICATION NUMBER: U9/09/25,633
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.1
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LENGTH: 402
; TYPE: DNA
; ORGANISM: Canis familiaris
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US-10-787-382-7
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Matches 402; Conserv
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Publication No. US20040191868A1
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Best Local
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SOFTWARE: PatentIn Ver.
SEQ ID NO 8
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Best Local Similarity
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APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/9/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR FILING DATE: 1999-05-28
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TYPE: DNA
ORGANISM: Canis familiaris
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RESULT 10
US-09-755-633-6/c
; Sequence 6, Application US/09755633
; Patent No. US20020127200A1
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LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
NAME/KEY: CDS
LOCATION: (29)..(430)
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CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION UMMER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
RUMBER OF SEQ ID NOS: 21
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RESULT 11

US-10-218-654-80

Sequence 80, Application US/10218654

Publication No. US20030099609A1

Publication No. US20030099609A1

GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: WONDER: JAINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1

CURRENT APPLICATION UNMBER: US/10/218,654

CURRENT FILING DATE: 2002-08-13

PRIOR APPLICATION UNMBER: US/09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 154
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APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEG ID NOS: 21
SECTIMARE: Patentin Ver. 2.1
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Best Local Similarity
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/9/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin ver. 2.0
SEQ ID NO 82
LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
US-10-218-654-82
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; TYPE: DNA
; ORGANISM: Canis famili.
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (29)..(430)
US-10-218-654-80
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Publication No. US20030099609A1
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                y Match 100.0%; Score 402; DB 14
Local Similarity 100.0%; Pred. No. 8e-115;
nes 402; Conservative 0; Mismatches 0
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SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 80

LENGTH: 610

TYPE: DNA

ORGANISM: Canis familiaris

FEATURE:

NAME/KEY: CDS

LOCATION: (29)..(430)

US-10-262-439-80
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US-10-262-439-80
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                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Sim, Gek-Kee APPLICANT: Yang, Shumi
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                                                                                                                                                             tch 100.0%; Score 402; DB 19 al Similarity 100.0%; Pred. No. 8e-115 402; Conservative 0; Mismatches
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                                                    61 GCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCCACTCAT
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 CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                    GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCTCCACTCAT
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                                                                                                                                                                                             DB 15;
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Indels Length

Gaps

148 120 88

610; <u>,</u>

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APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELLINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT FILING DATE: 2002-09-30
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/32,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-28
PRIOR PILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
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GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/32,306
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
INMBER OF SEQ ID NOS: 174
SOFTWARE: PATENTIN POS: 174
SOFTWARE: PATENTIN VET: 2.0
SEQ ID NO 82
LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
US-10-262-439-82
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Local Similarity 100.0%; Pred. No. 8e-115;
Les 402; Conservative 0; Mismatches 0
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Best Local Similarity
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Publication No. US20040191868A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 402;
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APPLICANT: McCall, Catherine
APPLICANT: Weber, Eric R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Canis familiaris FEATURE:
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LOCATION: (29)..(430)
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ALIGNMENTS

Query Mat Best Loca Matches	gene	COMMENT FEATURES SOURCE	AUTHORS TITLE JOURNAL	TITLE JOURNAL PUBMED REFERENCE	VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS	RESULT 1 AY412020 LOCUS DEFINITION ACCESSION
Query Match 69.0%; Score 277.2; DB 9; Length 405; Best Local Similarity 80.6%; Pred. No. 3.5e-67; Matches 324; Conservative 0; Mismatches 78; Indels 0; Gaps 0;	/organism="homo sapiens" /mol type="genomic DNA" /db_xref="taxon:9606" <1	This seque them based	0 5 5 6 6 6 5	Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams,M.D. and Cargill,M. Inferring nonneutral evolution from human-chimp-mouse orthologous gene trios Science 302 (5652), 1960-1963 (2003) 14671302 2 (bases 1 to 405)	AY412020.1 GI:39767985 GSS. Homo sapiens (human) Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 405) Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,	AY412020 405 bp DNA linear GSS 16-DEC-2003 Homo sapiens IL5 gene, VIRTUAL TRANSCRIPT, partial sequence, genomic survey sequence.

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Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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NIH-MGC http://mgc.nci.nih.gov/.
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IMAGE: 6971772 5', mRNA sequence.
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Bldg. 31 Rm10A07 Bethesda, MD 20892
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CD559532.1 GI:31585600
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/mol_type="mkNA.
/db_xref="taxon:9606"
/db_xref="taxon:9606"
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                                      National Cancer Institute / NIH
Bldg. 31 Rm1DA07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC Clone distribution information can
                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 456)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
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Office of Cancer Genomics
found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
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80.6%;
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                                                                                                         CD559687

AGENCOURT_14497029 NIH_MGC_195 Homo sapiens cDNA clone
IMAGE:6971771 5', mRNA sequence.
                                                                   CD559687
CD559687.2 GI:38453484
                                                                                                                                                                                                                                                                                                    GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 402
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                     sapiens (human)
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/clone="IMAGE:6971772"
/tissue_type="mixed"
/lab host="0H5A (T1 phage-resistant)"
/lab host="0H5A (T1 phage-resistant)"
/clone lib="NHI MGC 195"
/clone lib="NHI MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxp-Sall; Site_2:
loxp-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxp sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
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mol_type="mRNA"

db_xref="taxon:9606"
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Pred. No. 3.6e-67;
0; Mismatches 78;
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High quality sequence start: 14
High quality sequence stop: 470.
Location/Qualifiers
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Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
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National Institutes of Health, Mammalian Gene Collection (MGC)
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://inage.llnl.gov
Plate: IRBK1 row: g column: 10
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On Jun 10, 2003 this sequence version replaced gi:31585755.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 470)
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  GGGGGTACTGTGGAAAGACTATTCAAAAACTTGTCCTTAATAAAGAAATACATTGACGGC
                                       GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC 300
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/tissue_type="mixed"
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/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Vector: poled contain the complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is cDNA derived from either pooled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Blosciences/clontech and Washington University).
PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Barl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Prederick, NCI-Prederick, Prederick, MD 21702). For information on which gene each clone represents, please
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ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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1 (bases 1 to 492)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
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Bldg. 31 Rm10A07 Bethesda, MD 20892
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AGENCOURT 14496993 NIH MGC 195 Homo
IMAGE:6971771 5', mRNA sequence.
CD55953
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CONA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
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Tissue Procurement: Narayan Bhat
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                                                                                                                                                   PCR-amplified using gene-specific primers to contain the complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is CDNA derived from either pooled cytoplasmic polya RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Biosciences/Clontech and Washington University). PCR products are directionally cloned into the loxp sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For
                                                                                  visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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                69.0%;
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Score 277.2; DB 6;
Pred. No. 3.6e-67;
0; Mismatches 78;
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
Direct Submission
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Terriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
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                                                                                                                                                                                                                                                                                                Rockville, MD 20850, USA
This sequence was made by sequencing
                                                                                                                                                                                                                                                                                                                                                                       Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Science 302 (5652), 1960-1963 (2003)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
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                                                                                                                                                                                                                                                                        based on alignment.
                                                                                           /db_xref="taxon:9598"
                                                                                                                                                                                                                                      Location/Qualifiers
/gene="IL5"
/locus_tag="HCM4418"
                                                                                                                                                                      organism="Pan troglodytes"
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Score 273.2; DB 9; Pred. No. 4.7e-66;

Length 405;

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             Direct Submission
Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                     human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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Eutheria; Primates;
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                 CD559688
CD559688.2
EST.
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This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
                                                            467 bp
AGENCOURT 14496964 NIH MGC 195 H
IMAGE:6971770 5', mRNA sequence.
CD559688
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NIH-MGC Project URL: http://mgc.nci.nih.Contact: MGC help desk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAACTTGGCTGATAGGCGATGGGGAACCTGATGATTCCTACTCCTGAAAAATAAAAATCAC
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                                                                                                                                                                                                                                                                                                                            CAAAAAAAA - GTGTGGAGAAGAAGACGGAGAGTAAACCAATTCCTAGACTACCTGCAA
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/tissue_type="PCR rescued
/clone_lib="NIH_MGC_195"
/lab_host="DH10B"
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/db_xref="taxon:9606"
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                                          GI:38453486
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 467)
NIH-MCC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota;
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Similarity 80.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: IRBK1 row: g column: 09
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| GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC
                                                                                     CAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAA
                                                                                                                                                                                              CGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCAC
                                                                                                                                                                                                                                                       CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC 180
                                                                                                                                                                                                                                                                                                             CCCACAGAAATTCCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCAT
                                                                                                                                                                                                                                                                                                                                                                   GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
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                                                                                                                                        CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC 240
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/clone="IMAGE: 5971770"
/tissue_type="mixed"
/lab host="UH5A (T1 phage-resistant)"
/lab host="UH5A (T1 phage-resistant)"
/lab host="UH5A (T1 phage-resistant)"
/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxp-Sall; Site_2:
/note="Vector: pDNR-Dual; Site_1: loxp-Sall; Site_2:
/note="Vector: pDNR-Dual; Site_1: library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Blosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxp sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
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nes 77;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg, 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat Laboratory
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: IREK1 row: g column: 09
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1 (bases 1 to 478)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
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High quality sequence start: 3
High quality sequence stop: 478.
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On Jun 10, 2003 this sequence version replaced gi:31585602.
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EST.
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AGENCOURT_14496928 NIH_MGC_195 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMAGE:6971770 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAAAAAAA-GTGTGGAGAAGAAGACGGAGAGTAAACCAATTCCTAGACTACCTGCAA 85
                                                                                                                                                                                                                                                                              /lab_host="DH5A (Ti phage-resistant)"
/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Tvector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR 1s cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/clontech and Washington University).
               PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.data Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db xref="taxon:9606"
/clone="IMAGE:6971770"
/tissue_type="mixed"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
|mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ocation/Qualifiers
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Query Match Best Local Similarity

66.4%; 80.6%;

Score 266.8; DB 6; Pred. No. 3.1e-64;

Length 478;

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JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
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SOURCE
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BC066279
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                                                                                                                                                                                                                                   TITLE
                                                                    JOURNAL
                                                                                                                                                                                                                                             Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Kzzwinski, M.I., Skalska, U., Smailus, D.E.,
Generath, A., Schein, J.E., Jones, S.J. and Marra, M.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           345
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  Direct Submission

Direct Submission

Submitted (03-FEB-2004) National Institutes of Health, Mammalian Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Gene Collection (MGC), Cancer Genomics Office, National Cancer Theritate. 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                  Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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Mammalia; |
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Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                      ACCESSION
VERSION
KEYWORDS
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  SOURCE
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Best Local
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                        BC066280
BC066280.1
HTC.
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Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at: http://lmage.llnl.gov Series: IRAK Plate: 172 Row: a Column: 15 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032 This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH-MGC Project URL: http://mgc.nci.nih.Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Web site:
                                                                                                                Homo sapiens
                                                                                                                                      BC066280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dickson, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact:
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                                                                                                                                                                                                                                                                                                                                                                                                C-AAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCA 359
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                                                                                                                                                                                                                                                                                       AGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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sapiens (human)
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/db_xref="taxon:9606"
/clone="IMAGE:6971768"
/tissue type="PCR rescued c
/clone Tib="NIH MGC 195"
/lab_host="DH10B"
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                                              GI:42490838
                                                                                                                   cDNA clone
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Pred. No. 4.6e-64;
0; Mismatches 78;
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                                                                                                                458 bp mRN
IMAGE:6971769,
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Best Local Similarity
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Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Distchenko, L., Marusins, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Ugdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
MCRernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Banchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickeon, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
P. 12477932
  61
                                                   24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: MGC help desk
Email: cgspbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
Web site: http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 16 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032 This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
Submitted (03-PEB-2004) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ickson, M.,
  GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCTCCACTCAT 120
                                                                                ATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTGGAGCTGCCTACGTGTATGCCATC 83
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                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9606"
/clone="IMAGE:6971769"
/tissue type="PCR rescued c
/clone Tib="NIH MCC 195"
/lab_host="DH10B"
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Pred. No. 4.6e-64;
0; Mismatches 78
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1999)
On Jun 10, 2003 this sequence version Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plate: IRBK1 row: g column: 08 High quality sequence stop: 463.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGENCOURT 14496865 NIH MGC 195
IMAGE: 6971769 5', mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     found through the I.M.A.G.E. http://image.llnl.gov Plate: IRBK1 row: g column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
1 (bases 1 to 463)
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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/note="Vector: pDNR-bual; Site_1: loxp-HindIII; Clones from this library have been
loxp-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polya RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/clontech and Washington University).
                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"
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/clone="IMAGE:6971769"
                                                                                                                                                                                                                                                                                                                                                                                         organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                               ocation/Qualifiers
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RESULT 13
CD559689/c
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ORGANISM
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COMMENT
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Best Local Sim.
Matches 324;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
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Tissue Procurement: Narayan Bhat CDNA Library Preparation: Bhat Laboratory CDNA Library Preparation: Bhat Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: IRBK1 row: g column: 08
                                                                                                                                                                                                                        Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CD559689 473 bp mRNA linear ES: AGENCOURT 14496901 NIH MGC 195 Homo sapiens cDNA clone IMAGE:6971769 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585757
                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 473)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCACAGAAATTCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCAT 147
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 402
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens (human)
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Pred. No. 4.6e-64;
0; Mismatches 78;
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ACCESSION VERSION KEYWORDS

CD559536 CD559536.2 EST.

GI:38558953

ORGANISM

Homo

sapiens (human) sapiens

Homo

RESULT 14 CD559536

DEFINITION Locus

CD559536

AGENCOURT 14496804 NIH MGC 195 Homo IMAGE: 6971768 5', mRNA Bequence.

489 bp

mRNA sapiens

linear

EST 26-NOV-2003

cDNA clone

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Best Local Sim:
Matches 324;
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                                                                                                                                                                                                                                     GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGC 300
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                        AGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 402
                                                                                                   CAAAAAAAAAGTGTGGGAGAAGAAGACGGAGAGTAAACCAATTCCTAGACTACCTGCA
                                                                                                                                                 C-AAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCA 359
                                                                                                                                                                                                       GGGGGTACTGTGGAAAGACTATTCAAAAACTTGTCCTTAATAAAGAAATACATTGACGGC 150
                                                                                                                                                                                                                                                                                                              CAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAA 210
                                                                                                                                                                                                                                                                                                                                                                                                                  CGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCAC
AGAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /lab host="NHSA (TI phage-resistant)"
/clone_lib="NIH_MGC_195"
/note="Vector: pDNR-baal; Site_1: loxP-Sall; Site_2:
/note="Vector: pDNR-baal; Site_2: loxP-Sall; Site_2:
/note="Vector: poled contain the common pole sequences available from NCBI's RefSeq). Template for PCR is cDNA
/note="Vector: poled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr.
/narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
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'tissue_type="mixed"
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Pred. No. 4.6e-64;
0; Mismatches 78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov
Plate: //image.llnl.gov
Plate: IRBKI row: g column: 07
High quality sequence start: 17
High quality sequence stop: 489.
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Tissue Procurement: Nazayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
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National Institutes of Health, Mammalian Gene Collection (MGC)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                   CGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAATCAC
                                                                                                                                                                                                                                                                                   CCCACAGAAATTCCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCAT
                                                                                                                                                                                                                                                                                                                 GCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
                                            GGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAAAGAACACATAGAGCGC 300
                                                                                                                                       CAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCAC 240
                                                                                                                                                                                                                                                                                                                                                                                                              ATGAGAATGCTTCTGAATTTGAGTTTTGCTAGCTCTTTGGGGCCTATGTTTCTGCCTTT 60
                                                                                                                                                                                        CGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCAC
                                                                                                                                                                                                                                                                                                                                                                                 ATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTTGGAGCTGCCTACGTGTATGCCATC 113
GGGGGTACTGTGGAAAGACTATTCAAAAACTTGTCCTTAATAAAGAAATACATTGACGGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone="IMAGE:6971768"
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/lab host="DH5A (T1 phage-resistant)"
/lab host="DH5A (T1 phage-resistant)"
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/clone lib="NIH MGC_195"
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loxP-HindIII; Clones from this=library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polya RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxp sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Liboratory, Research Technology Program, SAIC
Prederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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_xref="taxon:9606"
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80.4%;
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Pred. No. 4.6e-64;
0; Mismatches 78;
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PUBMED
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AUTHORS
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AUTHORS
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Strauberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,

Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

McKernan, K.J., Malak, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Glbbs, R.A.,

Pahey, J., Helton, B., Ketteman, M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, B.D.,

Boutfard, G.G., Blakesley, R.W., Touchman, J.W., Green, B.D.,

Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

Generation and intial analysis of more than 15,000 full-length

human and mouse cDNA sequences

Ph. 1247932
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-remail.nih.gov
Tissue Procurement: Anup Madan, University of Iowa
CDNA Library Preparation: Anup Madan, University of Iowa
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Neurogenomics Research Lab,
200 B EMRB, University of Iowa, Iowa City, IA-52242
                                                                                                                                                                                                                        through the I.M.A.G.E. Consortium/LINL
Series: Plate: Row: Column: 0
This clone has the following problem: f
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 817)
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817 bp mRNA linear HTC 26-APP
Homo sapiens cDNA clone IMAGE:7216996, containing frame-shift
                                                                                                                                                                                                                                                                                                                                                                         Clone distribution: MGC clone distribution
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jessica Fahey, Tim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     anup-madan@uiowa.edu
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                                                                                                                                                                                       Location/Qualifiers
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Search completed: August
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                                                                                                                                                                                                                                                                                                                            405 AGAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT 447
                                                                                      360 AGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 402
                                                                                                                           285 GGGGGTACTGTGGAAAGACTATTCAAAAACTTGTCCTTAATAAAGAAATACATTGACGGC 344
                                                                                                                                                                                                                                                                                181 CAACTGTGCATTAAAGAAGTTTTTCAGGGGTATAGACACATTGAAGAACCAAACTGCCCAC 240
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               8, 2005, 08:46:07
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length: 2000000000
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ALIGNMENTS

ORIGIN NT OS Canis familiaris (dog)
PN JP 2002516104-A/68
PD 04-JUN-2002
PF 28-MAY-1998 US 60/087306
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/395,
PC A61K45/00, A61X48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535,
PC C07K14/54, C07K14/705, C07K16/24, C07K16/29 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

1 (bases 1 to 345)

Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.

Canine and feline immunoregulatory proteins, nucleic acid molecules and method of using the same Patent: JP 2002516104-A 68 04-JUN-2002; Canine and feline immunoregulatory and method of using the same. PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC and feline immunoregulatory proteins, nucleic acid CC JP 2002516104-A/68. Canis familiaris (dog) BD211562.1 GI:33021332 A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535, C07K14/54, method of using the same /organism="Canis familiaris" /mol_type="genomic DNA" /db_xref="taxon:9615" Location/Qualifiers Location/Qualifiers 345 . (345). ģ DNA linear PAT 17-JUL-2003 proteins, nucleic acid molecules g g

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Mammalla; Eutheria; Carnivora; Fissipedia; Canidae; Canidae

Bikaryota; Metazoa; Chordata; Craniata; Canidae; Canidae

Bikaryota; Metazoa; Carnivora; Fissipedia; Canidae; Canidae

Canidae and feline immunoregulatory proteins, nucleic acid molecules

and method of using the same

Patent; JP 2002516104-A 69 04-JUN-2002;

PR 29-MAY-1990 JP 2000551002

PR 29-MAY-1990 US 60/087306

PR 29-MAY-1990 US 60/0873
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
Canine IL-4 immunoregulatory proteins and uses
Patent: US 6471957-A 85 29-OCT-2002;
Location/Qualifiers
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                           CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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                                                                                      CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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/mol_type="genomic |
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AR241541
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AR254496
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses ther
Patent: US 6471957-A 87 29-OCT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown
                                     1 (bases 1 to 345)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney IL-13 immunoregulatory proteins and uses
Patent: US 6482403-A 85 19-NOV-2002;
                                                                                     Unknown
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/mol_type="genomic
          organism="unknown"
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney II-13 immunoregulatory proteins and uses
Patent: US 6482403-A 87 19-NOV-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unclassified.
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CGCCAAAAAAAAGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                         CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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/mol_type="genomic DNA"
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Pred. No. 6.9e-180;
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Euteleostomi; Canis.

acid molecules

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REFERENCE
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PC A61K45/00,A61K48/00,A61P37/02,A61P2
PC C07K14/54,
PC C07K14/56,C07K14/705,C07K16/24,C071
G01N33/15,
PC G01N33/50,C12N15/00,A61K37/02,A61K3
PC G01N33/50,C12N15/00,A61K37/02,A61K3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 402 bp DNA linear PAT 17-JUL-2003 Canine and feline immunoregulatory proteins, nucleic acid molecules and method of using the same.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

1 (Dases 1 to 402)
Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
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R 29-MAY-1998 US 60/087306

I GEKKER SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC

C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,

C A61K39/395,

C A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535,
CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                      CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                                                          CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                                                                                                                                                                                               CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT
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                                                       CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                          CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
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C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10, PC
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JP 2002516104-A/66
04-JUN-2002
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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Pred. No. 6.9e-180;
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BD211561/c
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                                                                                                                                                                                                                                                                                      1 TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
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BD211561
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S. Canine and feline immunoregulatory proteins, nuc and method of using the same Patent: JP 2002516104-A 67 04-JUN-2002;
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Canis familiaris
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JP 2002516104-A/67.
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CGCCAAAAAAAAGTTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                             CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAAGAACACATAGAG
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                                                                                                                            CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
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                                                    CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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JP 2002516104-A/67
04-JUN-2002
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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Pred. No. 6.9e-180;
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AR241539/c
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AR241538
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Best Local Similarity
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Sequence 83
AR241538
AR241538.1
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R. Canine IL-4 immunoregulatory proteins and uses th Patent: US 6471957-A 83 29-OCT-2002;
Location/Qualifiers
                                                                                                                                                          AR241539
Sequence 84
AR241539
                                       1 (bases 1 to 402)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
Canine II-4 immunoregulatory proteins and uses
Patent: US 6471957-A 84 29-OCT-2002;
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Conservative 0
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                         Location/Qualifiers
 /organism="unknown"
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AR254494
                                                                                                                                                                                                                                                                                                                                                  i (bases 1 to 402)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
Caniney II-13 immunoregulatory proteins and use
Patent: US 6482403-A 83 19-NOV-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
Unclassified.
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 CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                           CACGGGGAGGCTGTGGATAAACTATTCCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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/mol_type="genomic |
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Pred. No. 6.9e-180;
Mismatches 0;
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AR254495
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Yang, S., Sellins, K.S., Weber, E. and McCall, C. Canine interleukin-5: molecular characterization of the expression of biologically active recombinant protein J. Interferon Cytokine Res. 21 (6), 361-367 (2001)
                                                                                                                                                      AF331919 610 bp
Canis familiaris interleukin-5 m
AF331919
AF331919.1 GI:15919180
                                                                                                         Canis familiaris (dog)
Canis familiaris
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
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m,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
niney IL-13 immunoregulatory proteins and uses thereof
tent: US 6482403-A 84 19-NOV-2002;
Location/Qualifiers
                                                              (bases 1 to 610)
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/mol_type="genomic DNA"
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Pred. No. 6.9e-180;
Mismatches 0;
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         Patent: U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT
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Submitted (22-DEC-2000) Immunology, Heska Corporation,
Prospect Parkway, Ft Collins, CO 80525, USA
Location/Qualifiers
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                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; 1 (Dases 1 to 610)
Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S. Canine and feline immunoregulatory proteins, nucleic and method of using the same patent; JP 2002516104-A 64 04-JUN-2002;
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/product="interleukin-5"
/product="interleukin-5"
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IGDONLMIPTPENKHHQLCIKEVFQGIDTLKNQTAHGEAVDKLFQNLSLIKEHIERQK
KRCAGERWRVTKFLDYLQVFLGVINTEWTPES"
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/mol_type="mRNA"
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PD 04-JUN-2002

PF 28-MAY-1999 JP 2000551002

PR 29-MAY-1998 US 60/087306

PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395, PC A61K39/395, PC A61K45/00, A61K48/00, A61B37/02, A61P37/04, C07K14/475, C07K14/535, PC C07K14/54,

PC C07K14/54,

PC C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC G01N33/15, C12N15/00, A61K37/02, A61K37/66, C12N5/00 CC G01N33/15, C12N15/00, A61K38/00, A61K38/0
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

1 (bases 1 to 610)

Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nucleic acid molecule and method of using the same Patent: JP 2002516104-A 65 04-JUN-2002; HESKA CORP OS Canis familiaris (dog)
PN JP 2002516104-A/65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BUZILIBY 610 bp DNA linear PAT 17-JUL-2003 Canine and feline immunoregulatory proteins, nucleic acid molecules and method of using the same.
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JP 2002516104-A/65.
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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P 28-MAY-1999 JP 2000551002
PR 29-MAY-1998 US 60/087306
PR 29-MAY-1998 US 60/087306
PR 29-MAY-1998 US 60/087306
PR 29-MAY-1998 US 60/087306
PR 20-MAY-1999 U
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ALIGNMENTS

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AAZ55550;

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RESULT 1
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   Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline FIt-3 ligand, canine or feline CD140, canine or feline CD154 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GWCSF), and nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune
                                                                                                                                          Claim 1h; Page 226-227; 264pp; English.
                                                                                                                                                                      Nucleic acids encoding immunoregulatory proteins from cats or useful for treating or preventing e.g. tumors or autoimmune di
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Plt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and concleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune cresponse in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including a largies, tumours, inflammation and graft rejection, and to increase the cresponse from a co-administered antigen. The nucleotide sequences can also be used for the recombinant production of a protein, while cas sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
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Sequence 345 BP; 79 A; 78 G 68 G; 120 T; 0 U; 0 Other;

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Query Match
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Pred. No. 2.3e-168;
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AAZ55548 standard; cDNA; 402

14-MAR-2000

(first entry)

Canine interleukin-5 (IL-5) cDNA coding region.

Interleukin-5; immunoregulation; IL-5; antibody; canine; inhibitor; immune response; ase; vaccine; ss.

Canis familiaris

WO9961618-A2

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ARZSSIAT
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ID AAZ55549 standard; cDNA; 402 BE
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Pred. No. 2.3e-168;
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P-PSDB; AAY58219.
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Pred. No. 2.3e-168;
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Mismatches

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Gaps

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Length 402; Indels

129 T; 0 U; 0 Other;

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                                                                                                                                                       CC interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD54 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFW-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and rucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including allergies, tumours, inflammation and graft rejection, and to increase the response from a co-administered antigen. The nucleotide sequences can also be used for the recombinant production of a protein, while nucleotide fragments are useful as probes, as amplification primers and as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
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TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
                                                         Conservative
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29. .433
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                                                        Score 345; DB 3; Pred. No. 2.3e-168; Mismatches 0;
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                      Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD40, canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including
                                                                                                                                                                                                                                                                                                                                                                           Claim 1h; Page 224-225; 264pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acids encoding useful for treating or
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immunorequlation; tumour; cancer; autoimmune disease; vaccine; ss.
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tumours, inflammation and graft rejection,

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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Canine interleukin-5 coding
Claim 31; Page 46; 48pp; English
                                                 Novel canine interleukin 5 polynucleotide and polypeptides are used for generating antibodies which are useful in treating allergies in dogs.
                                                                                                                                                                                                                           Guo H,
                                                                                                                                                                                                                                                                                  (IDEX-)
                                                                                                                                                                                                                                                                                                                                          10-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2000; 2000WO-US021651.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dog; interleukin-5; IL-5; allergy; cancer; gene therapy; inflammatory reaction; ds.
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DB; AAB72615.
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                                                                                                                                                                                                                           Lawton R,
                                                                                                                                                                                                                                                                                  IDEXX LAB
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Pred. No. 2.3e-168;
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                                                                                                                                               Novel canine interleukin 5
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The present invention provides the protein and coding canine interleukin-5 (IL-5) protein. This can be used

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                                                                                                                                       The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies,
                                                                                                                                                                                                                                                          Novel canine interleukin 5 polynucleotide and polypeptides are used generating antibodies which are useful in treating allergies in dogs
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                                                                                        cancer and inflammatory reactions in dogs. The present sequence version of the IL-5 coding sequence shown in the specification
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inflammatory reaction; ds.
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                                                                                                                                                                                                                                                                                                                                       P-PSDB; AAB72616.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-FEB-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          (IDEX-)
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hes 270;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46 ACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        IDEXX LAB INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATA
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                                                                                                                   erleukin-5 (IL-5) protein. This inflammatory reactions in dogs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inflammatory reactions in dogs. The present sequence the IL-5 coding sequence shown in the specification {\bf r}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                              A; 54 C;
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                                              G; 69 T;
  195;
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             The sequences given in AAT50755-56 encode ovine interleukin-5 (IL-5). Ovine IL-5 or IL-12 are used to treat and/or prevent infections in livestock (esp. cows and sheep), particularly where the animals are stressed, e.g. during transport. IL-5 and IL-12 can also be used as adjuvants in vaccines for veterinary use (partic. weakly immunogenic subunit or synthetic peptide vaccines). They may also be used to treat cancer, immunosuppression and allergy, to enhance/suppress the reproductive system and to promote growth or early maturity. Optionally interleukin can be delivered from constructs or delivery cells and antibodies are useful in enzyme immunospotentiators, especially IL-5 infection. The interleukins are immunopotentiators, especially IL-5
promotes growth of early haematopoietic
                                                                                                                                                                                                                                                                         Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock.
                                                                                                                                                                                                                                                                                                                                P-PSDB; AAW08479.
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27-OCT-1995;
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antibody; diagnosis; immunopotentiator;
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24-SEP-1997
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95AU-00006244.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of cytotoxic cells from thymocytes, also it stimulates production and secretion of IgM and IgA (in synergism with bacterial endotoxin). IL-12 induces production of gamma-interferon by, and proliferation of, T and NK cells and increases the (non-) specific cytolytic lymphocyte response. The genetic constructs can also be used for in vitro production of IL-5 or -12. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                    exon
                                                                                                                                                                                                                                                                                                                                                                                                                        antibody; diagnosis; immunopotentiator; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
                                                                                                                                                                                                                                                                                                     exon
                                                                                                                                                                                                                                                                                                                                                                                                        Ovis aries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ovine IL-5 gene
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24-SEP-1997
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                                                                                                             14-JUN-1995;
27-OCT-1995;
                                                                                                                                             14-JUN-1996;
                                                                                                                                                                                                                                                                                                                                     exon
                                                                                                                                                                                                                                                                                                                                                                      CDS
Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock
                                  P-PSDB;
                                                                                                                                                                  03-JAN-1997.
                                                                                                                                                                                        WO9700321-A1.
                                                                                       (CSIR )
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                                            1997-077528/07.
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                                                                                        COMMONWEALTH
                                   AAW08479
                                                                  Wood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCAC 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCAC 110
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95AU-00006244.
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                                                                                                                                                                                                                                                                                                                                               "Ovine_IL-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>.</u>
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Query Match Best Local

12.5%;

Score 43; Pred. No.

DB 2; L

Length 520;

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antibodies are useful in enzyme immunoassays for rapid diagnosis of infection. The interleukins are immunopotentiators, especially IL-5 promotes growth of early haematopoietic progenitor cells and generation of cytotoxic cells from thymocytes, also it stimulates production and secretion of IgM and IgA (in synergism with bacterial endotoxin). IL-12 induces production of gamma-interferon by, and proliferation of, T and NK cells and increases the (non-)specific cytolytic lymphocyte response. The genetic constructs can also be used for in vitro production of IL-5 or - 12. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequences given in AAT50755-56 encode ovine interleukin-5 (II-5). Ovine IL-5 or IL-12 are used to treat and/or prevent infections in livestock (esp. cows and sheep), particularly where the animals are stressed, e.g. during transport. IL-5 and IL-12 can also be used as adjuvants in vaccines for veterinary use (partic. weakly immunogenic
                                                                                                                                                                                                                                                                                                                                   subunit or synthetic peptide vaccines). They may also be used to treat cancer, immunosuppression and allergy, to enhance/suppress the reproductive system and to promote growth or early maturity. Optionally interleukin can be delivered from constructs or delivery cells and
Sequence 520 BP; 166 A; 99 C; 124 G; 131 T; 0 U; 0 Other;
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RESULT 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             accine; cysticercosis; protective antigen; cCl; cC3; cC4; cysticercus; gamma interferon; IFN-gamma; interleukin 5; IL-5; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        l Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCAC 155
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This invention describes a novel nucleic acid vaccine for preventing an curing human and pork cysticercosis. The invention involves the formatt of a eukaryotic expression plasmid from fusion transcript expression ur consisting of three protective antigen genes (cCl, cC3 and cC4) of pig tenial cysticercus and coexpression unit of related cell factor gamma interferon (IFN-gamma) and pork interfeukin 5 (IL-5)] genes. The

unit and

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process

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Claim 3;

Page 9;

21pp; Chinese

WPI; 2000-087904/08

acid vaccine for cysticercosis co-contracted by

human

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RESULT 13
ABX75427
AID ASA75
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                        The invention relates to an isolated nucleic acid molecule comprising a CC length of about 100 nucleotides of less, which has a sequence at least CC about 70% identical to the human conserved non-coding sequence (CNS)-1 CC sequence (a locus control region (LCR) element in interleukin gene CC cluster region of chromosome 5931 containing interleukin (IL) 4, IL5 and CL L13). Optionally, the nucleic acid has 70% identity to a human CNS-2 to CNS-16 or mouse CNS-1 to CNS-16 or their complements. Also included are: CC (1) an expression cassette comprising a CNS-1 sequence operably linked to a promoter which controls transcription of a heterologous coding sequence (2) an expression cassette consisting essentially of an IL-4 gene, an IL-13 gene and a CNS-1 sequence; (3) an expression cassette comprising an CC IL-4 gene, an IL-13 gene, and a CNS-1 sequence flanked between two CC recombination site sequences; (4) an expression cassette comprising an IL CC -4 gene and an IL-13 gene and lacking a CNS-1 sequence; (5) a T cell CC comprising one of the expression cassettes or the T-cell; and (7) a northwest transgenic animal comprising one of the expression cassettes or the T-cell; and (7) animal comprising one of the expression cassettes or the T-cell; and (7) animal comprising one of the expression cassettes or the T-cell; and (7) animal comprising one of the expression cassettes or the T-cell; and (7) animal comprising one of the expression cassettes or the T-cell; and (7) animal comprising one of the expression cassettes or the T-cell; and (7) animal comprising one of the expression cassettes or the T-cell; and (7) animal comprising one of the expression cassettes or the T-cell; and (7) animal comprision or animal
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Matches 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel isolated nucleic acids which are locus control region elements in interleukin gene cluster region of chromosome, referred as conserved non-coding sequences, useful for modulating expression of cytokine genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 838 BP; 280 A; 148 C; 171 G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Page 23; 48pp; English
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Pred. No.
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gene used in the
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chromosome. The T cell is useful for identifying a compound that modulates binding of a transcription factor to a CNS-1 sequence which involves contacting the compound with the T cell and determining the functional effect of the compound on binding of the transcription factor to the CNS-1 sequence. The compound is an antisense sequence of the CNS sequence, an antibody against the transcription factor, or a small compound. The nucleic acid is useful for modulating expression of 1 or more cytokine genes and has a diagnostic tool to screen patients having disease related to cytokine gene expression. The expression of CNS sequence is on cytokine gene expression cassettes with and without CNS is on cytokine gene expression. Expression cassettes with and without CNS are identical except one line has the CNS-1 sequence and the other line lacks the CNS-1 sequence. The transgenic animals that are identical except one line has the CNS-1 sequence and the other line lacks the CNS-1 sequence. The transgenic animals are useful as in vivo models for various therapeutic modalities. The present sequence is a reverse transcriptase (RT)-PCR primer used to monitor the effects of CNS-1 lacks the CNS-pression in a transgenic mouse strain which has the gene
Query Match
Best Local (
                                                                                         Sequence
                                                                                         26 BP; 12 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                      chromosome 5q31 with and without CNS-1
                           Score 21;
      2 DB
                              8
                              Length 26;
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Matches
                    Similarity
ATAAAAATCACCAACTGTGCA 133
              Conservative
                    6.1%;
              0
                     Pred. No.
              Mismatches
                    2
              0
              Indels
              0
             Gaps
              0
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RESULT 14 Interleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 ligand; interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline; granulocyte macrophage colony-stimulating factor; inhibitor; immune response; immunoregulation; tumour; cancer; autoimmune dis Synthetic Canine IL-5 sense PCR primer, 14-MAR-2000 AAZ55591 standard; WO9961618-A2 Canis familiaris (first entry) primer; ss DNA; 36 ВP SEQ ID NO:137. disease;

28-MAY-1999; 99WO-US011942

(HESK-) HESKA CORP.

29-MAY-1998;

98US-0087306P

Yang Ś Dreitz MJ, Wonderling

WPI; 2000-072623/06.

Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease

Page 107; 264pp; English.

The invention relates to canine interleukin-4 (IL-4), canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD54 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and proteins. The proteins,

transgenic

sequence is

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RESULT 15
AAN91647
ID AAN91
XX AAN91
AC AAN91
XX 25-MAI
DT 25-MAI
DT 21-MAI
XX Growt
PH Key
FT CDS
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21-MAR-1990
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                                                                                                                                                                   Has sites for HindII, BspMI, NCOI, SpeI, BspMII, ApaLI, XmnI, XhoI ClaI, BalI, PstI, DraIII, BamHI and EcoRI. IL5 acts as a B cell growth and differentiation factor. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                  Synthetic gene encoding human interleukin-5 - has restriction sites at frequent intervals to facilitate manipulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1989-311767/43.
P-PSDB; AAP93152.
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                                                                                                  Sequence 370 BP; 126 A; 73 C; 82 G; 89 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                 Claim 1; Fig 3a; 21pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BRBI-)
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6.1%; Score 21; DB 1; Length 370; 100.0%; Pred. No. 2.4;
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120 ATAAAATCACCAACTGTGCA 140
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Search completed: August 8, Job time : 232.259 secs

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Perfect score:
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  2005, 01:09:58; Search time 70.2587 Seconds (without alignments) 8034.812 Million cell update
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US-09-451-527-87
US-09-451-527-87
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US-09-566-818-33
US-09-566-818-37
US-09-566-818-31
US-09-556-818-31
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US-09-556-818-43
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US-09-949-016-13393	US-09-949-016-12101	US-09-949-016-12146	US-09-949-016-13920	US-09-949-016-13610	US-09-949-016-13583	US-09-270-767-15637	US-09-270-767-355	US-09-949-016-74520	US-09-949-016-74519	US-09-949-016-74518	US-09-949-016-63405	US-09-451-527-138	US-09-322-409-138	US-08-621-841-48	US-09-949-016-13968	5324640-1	5324640-1
Sequence 13393, A	Sequence 12101, A	Sequence 12146, A	Sequence 13920, A	Sequence 13610, A	Sequence 13583, A	Sequence 15637, A	Sequence 355, App	Sequence 74520, A	Sequence 74519, A	Sequence 74518, A	Sequence 63405, A	Sequence 138, App	Sequence 138, App	Sequence 48, Appl	Sequence 13968, A	Patent No. 5324640	Patent No. 5324640

ALIGNMENTS

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GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLBIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: 050-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 85
LENGTH: 345
TYPE: DNA
ORGANISM: Canis familiaris
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Matches 345; Conserv
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                     CGCCAAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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ilarity 100.0%; Pred. No. 1.2e-162;
Conservative 0; Mismatches 0;
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CAAGTATTTCTTGGTGTAATAAACACCCGAGTGGACACCGGAAAGT

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RESULT 3
US-09-451-527-85
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US-09-322-409-87/c
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                                                                                                                                                                                                         Sequence 85, Application Patent No. 6482403
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APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CALINE AND FELLIE IMMUNOREGULATORY PROTEINS, NUCLEIC FILE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: 924centin Ver. 2.0
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
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APPLICANT: Yang, Shumin
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EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-29
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTMARE: Patentin Ver. 2.0
SEQ ID NO 85
LENGTH: 345
TYPE: DNA
ORGANISM: Canis familiaris
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; LOCATION: (1)..(345)
US-09-451-527-85
                                                                                                                                            APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNC
TITLE OF INVENTION: ACID MOLECULES, AND USES
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER PILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTMARE: Patentin Ver. 2.0
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                                                          ; ORGANISM: Canis
US-09-451-527-87
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                                                                                                             SEQ ID NO 87
LENGTH: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 87, Application US/09451527
Patent No. 6482403
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Best Local Similarity
                 Query Match
                                                                                             TYPE: DNA
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100.0%; Score 345; DB 4;
100.0%; Pred. No. 1.2e-162;
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Best Local Similarity Matches 345; Conserv

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red. No. 1.2 Mismatches

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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
SARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PatentIn Ver. 2.0
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US-09-322-409-83
US-09-322-409-83
; Sequence 83, Application U
; Patent No. 6471957
; GENERAL INFORMATION:
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Best Local Similarity
Matches 345; Conserva
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TYPE: DNA
ORGANISM: Canis familiaris
-09-322-409-83
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                CGCCAAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                            CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                         CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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Sequence Patent No. 6471ys.,
Patent No. 6471ys.,
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Trait, Matthew J.
APPLICANT: Dreit; Matthew J.
APPLICANT: Dreit; Matthew J.
APPLICANT: Dreit; Matthew J.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT FILING DATE: 1999-05-28
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SOFTWARE: Patentin Ver. 2.0
LENGTH: 402
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Sequence 83, Application US/09451527
Patent No. 6482403
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wanderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCL
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEG ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEG ID NO 84
LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
US-09-451-527-84
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TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-83
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EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 83
                                                Query Match 100.0%; Score 345; DB 4; Best Local Similarity 100.0%; Pred. No. 1.2e-162; Matches 345; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 84, Application Patent No. 6482403
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Matches 345;
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Pred. No. 1.2e-162;
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PRO:
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Vet. 2.0
SEQ ID NO 80
LENGTH: 610
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US-09-322-409-80
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Patent No.
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Best Local Similarity
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LOCATION: (29)..(430)
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RESULT 11
US-09-451-527-80
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CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 82
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Matches
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TYPE: DNA
ORGANISM: Canis f
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                                                     APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/323,409
EARLIER TILING DATE: 1999-05-28
JEARLIER FILING DATE: 1998-05-29
NUMBER: 05 SEQ ID NOS: 174
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EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 80
LENGTH: 610
TYPE: DNA
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US-09-451-527-82
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SOFTWARE: Pate
; SEQ ID NO 82
; SMGTH: 610
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 82, Application Patent No. 6482403 GENERAL INFORMATION:
  Query Match
Best Local Similarity
Matches 345; Conserv
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NAME/KEY: CDS
LOCATION: (29)..(430)
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100.0%; Score 345; DB 4; ilarity 100.0%; Pred. No. 1.2e-162; Conservative 0; Mismatches 0;
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                                         Length 610;
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Indels

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Gaps

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Sequence 1, Application US/09371615A
Patent No. 6537781
GENERAL INFORMATION:
APPLICANT: IDEXX LABORATORIES
TITLE OF INVENTION: METHODS AND COMPOSITIONS CONTITLE OF INVENTION: CANINE INTERLEUKIN 5
FILE REFERENCE: 03604001700US00
CURRENT APPLICATION NUMBER: US/09/371,615A
CURRENT FILING DATE: 1999-08-10
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
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US-09-371-615A-1
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Best Local Similarity
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TYPE: DNA
ORGANISM: Canis familiaris
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                   CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACA 336
                                                                                 CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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 CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACA
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Pred. No. 3.8e-158;
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Sequence 137, Application US/09322409

| Sequence 137, Application US/09322409
| Patent No. 6471957
| GENERAL INFORMATION:
| APPLICANT: Sim, Gek-Kee
| APPLICANT: Yang, Shumin
| APPLICANT: Yang, Shumin
| APPLICANT: Wonderling, Ramani S.
| TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
| TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
| FILE REFERENCE: IM-2-C1
| CURRENT APPLICATION NUMBER: US/09/322,409
| CURRENT FILING DATE: 1999-05-28
| EARLIER APPLICATION NUMBER: 60/087,306
| EARLIER FILING DATE: 1998-05-29
| NUMBER OF SEQ ID NOS: 154
| SOPTWARE: Patentin Ver. 2.0
| SEQ ID NO 137
                                                                                                                                                                                                               APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC:
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PALENTIN Ver. 2.0
SEQ ID NO 137
LENGTH: 36
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US-09-322-409-137
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Sequence 137, Application
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Best Local S
Matches 21
                                                            Query Match
Best Local :
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                                           Matches
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ORGANISM: Artificial
FEATURE:
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                                                                                                                                 FEATURE:
OTHER INFORMATION: Description
OTHER INFORMATION: Primer
                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                             TYPE: DNA
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                                                           Score 21;
Pred. No.
                                                                                                                                                        of Artificial Sequence:
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Search completed: August 8, 2005, 13:43:37 Job time: 71.2587 secs

Mis ASE BLAM (USDO)

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Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
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                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop_60.0 , Gapext 60.0
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/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
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/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
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/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
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SUMMARIES
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100.0	100.0	100.0	100.0	100.0	100.0	100.0	Query
345	345	345	345	345	345	345	Query Match Length DB
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US-10-787-382-9	US-10-262-439-87	US-10-262-439-85	US-10-218-654-87	US-10-218-654-85	US-09-755-633-11	US-09-755-633-9	DB ID
Sequence 9, Appli	Sequence 87, Appl	Sequence 85, Appl	Sequence 87, Appl	Sequence 85, Appl	Sequence 11, Appl	Sequence 9, Appli	Description

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	3	equence 10,	8,	equence 10,	8,	87	4	123	v	85,	e 12, /	137,	e 137,	12,	81, 7	e 19,	e 18,	19,	18, /	e 21,	21,	6	4, 1	82,	80,	e 82,	e 80	equence 6,	quence 4,	equence 8, Appl	e 7,	e 84,	e 83,	e 84,	e e	œ	7,	Sequence 11, Appl

ALIGNMENTS

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RESULT 1
US-09-755-633-9
                                                                       US-09-755-633-9
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SEQ ID NO 9
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Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Bric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELLIE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
                                                                                        NAME/KEY: CDS
LOCATION: (1)..(345)
                                                                                                                                       LENGTH: 345
TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
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  100.0%;
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  Score 345; DB 9; Length 345; Pred. No. 2.9e-172;
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APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC:
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 06/087,306
PRIOR FILING DATE: 1998-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
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; SEQ ID NO 11
; LENGTH: 345
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-755-633-11
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US-09-755-633-11/c
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Patent No. US20020127200A1
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                                                         CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                          CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                                                                                                 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                                                                                                                                                     CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAT
                                                                                                                                                                                                                CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT
                                                                                                                                                                                                                                                             TTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
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 CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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RESULT 4 US-10-218-654-87/c

Sequence 87, Application US/10218654
Publication No. US20030099609A1
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin

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; TYPE: DNA; CANIS familiaris; FEATURE: ; FEATURE: ; NAME/KEY: CDS; LOCATION: (1)..(345) US-10-218-654-85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR ETILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 85
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Monderling, Ramani S.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 85, Application US/10218654
Publication No. US20030099609A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      al Similarity
345; Conserv
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                        CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                                                     CGCCAAAAAAAAAGTTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTTCCTAGACTACCTG
                                                                                                                                                        CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                                                                                   CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTTAATAAAAGAACACATAGAG
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                                                                             CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 87
LENGTH: 345
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; ORGANISM: Canis familiaris
US-10-218-654-87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-262-439-85
                                                                              CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1998-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 85, Application US/10262439 Publication No. US20030143196A1
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Best Local :
                   SEQ ID NO 85
LENGTH: 345
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APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Sim, Gek-Kee APPLICANT: Yang, Shumii
                                                               SOFTWARE:
TYPE: DNA
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Similarity 100.0%; s
45; Conservative 0;
                                                                  Patentin Ver.
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Pred. No. 2.9e-172;
; Mismatches 0;
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Upreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 1202-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/087,306
PRIOR APPLICATION NUMBER: 09/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
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US-10-262-439-87/c
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                                                                                                                                                                                                                      ; ORGANISM: Canis familiaris US-10-262-439-87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 87, Application US/10262439 Publication No. US20030143196A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                SOFTWARE: Pa
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Best Local Similarity
                                                                                                                                            Matches
                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                         LENGTH: 34
TYPE: DNA
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NAME/KEY: CDS
LOCATION: (1)..(345)
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61 CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT 120
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                                                             TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT 286
                                                                                    TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
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                                                                                                                                        100.0%; ilarity 100.0%; Conservative 0
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                                                                                                                                      Score 345; DB 15;
Pred. No. 2.9e-172;
); Mismatches 0;
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Pred. No. 2.9e-172;
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APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Caline and Feline Immunoregulatory Proteins, Nucleic Title OF INVERTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVERTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/9/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 2
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US-10-787-382-9
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US-10-787-382-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 345; Conserv
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SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Canis familiaris FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 345
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                         CGCCAAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG 300
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                                                                                     CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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                                                                                                                                                                                                               US-09-755-633-7
Sequence 7, Application US/09755633

Patent No. US20020127200A1

GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: WcCall, Catherine A.
APPLICANT: Meber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
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SEQ ID NO 11
LENGTH: 345
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Best Local Similarity
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APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-CL-Cl
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/09/755,633
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1909-05-28
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PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
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CURRENT APPLICATION NUMBER: US/09/755,633

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APPLICANT: Yang, Shumin
APPLICANT: WcCall, Catherine A.
APPLICANT: WcCall, Catherine A.
APPLICANT: Weber, Exic R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
NUMBER OF SEQ ID NOS: 21
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PRIOR APPLICATION NUMBER: 09/32;
PRIOR FILING DATE: 199-05-28;
PRIOR APPLICATION NUMBER: 60/08;
PRIOR FILING DATE: 1998-05-29;
NUMBER OF SEQ ID NOS: 21;
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 7
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US-09-755-633-8/c
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; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-755-633-7
                                                                                                                                                                SOFTWARE:
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                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8, Application US/09755633 Patent No. US20020127200A1
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Best Local Similarity
                                                             Query Match
Best Local
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                                                                                                                    LENGTH: 402
TYPE: DNA
ORGANISM: Canis
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TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
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                                             100.0%; ilarity 100.0%; Conservative 0
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                                        0,
                                           Score 345; DB 9;
Pred. No. 3e-172;
; Mismatches 0;
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                  CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Wonderling, Ramani S.

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C1

CURRENT APPLICATION NUMBER: US/10/218,654

CURRENT APPLICATION NUMBER: US/09/322,409

PRIOR APPLICATION NUMBER: US/09/322,409

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 50/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 154

SOFTWARE: DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 154
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US-10-218-654-83
; Sequence 83, Application US/10218654
; Publication No. US20030099609A1
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TYPE: DNA
; ORGANISM: Canis familiaris
US-10-218-654-83
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Best Local Similarity
                                                                                                                                                                                                                                                        121 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACTATTGAAGAACCAAACTGCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        345;
                                                                                                                                                                                                                                                                                                                                                                              61 CATCGAACTTGGCTGATAGGCGATGGGAAACTTGATTCCTACTCCTGAAAATAAAAAT 120
CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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                                                                                                                                                  CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG 240
                                                                                                                                                                                                                                                                                                                                            CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT 177
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APPLICANT: Yang, Shumin

APPLICANT: Yang, Shumin

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

APPLICANT: Dreitz, Matthew J.

ITITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C1

CURRENT APPLICATION NUMBER: US/10/218,654

CURRENT FILING DATE: 2002-08-13

PRIOR APPLICATION NUMBER: US/9/322,409

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1999-05-29

PRIOR FILING DATE: 1998-05-29

PRIOR FILING DATE: 1998-05-29

PRIOR FILING DATE: 1998-05-29

PRIOR FILING DATE: 1998-05-29

PRIOR FILING DATE: 1998-05-29
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US-10-262-439-83
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US-10-218-654-84/c
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TYPE: DNA
CRGANISM: Canis familiaris
US-10-218-654-84
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Best Local S
Matches 345
                     Sequence 83, Application US/10262439
Publication No. US20030143196A1
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Draitz, Matthew J.
APPLICANT: Monderling, Ramani S.
APPLICANT: Monderling, Ramani S.
APPLICANT: Monderling, Ramani S.
APPLICANT: Monderling, Ramani S.
APPLICANT: MONDERLING AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACANINE AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 84
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Publication No. US20030099609A1
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CURRENT APPLICATION NUMBER: US/10/262,439
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             _
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                                                                                                                                                                                                                  APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: US/087,306
PRIOR APPLICATION NUMBER: 05/387,306
PRIOR FILING DATE: 1999-05-29
PRIOR FILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 83
LENGTH: 402
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 84, Application US/10262439 Publication No. US20030143196A1
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Best Local Similarity
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Query Match
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PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR TILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
                                                                                                                                                                        NUMBER OF SEQ ID NOS: 174
SOFTWARE: PatentIn Ver. 2
                                                               LENGTH: 402
TYPE: DNA
ORGANISM: Canis familiaris
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117 120 177 180 237 240 297 357

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CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/99/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR PRIOR PILING DATE: 1999-05-28
PRIOR PRIOR DATE: 1999-05-29
NUMBER: 0F SEQ ID NOS: 21
SOFTWARE: PACENTIN VET. 2.1
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TYPE: DNA
; ORGANISM: Canis familiaris
US-10-787-382-7
                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 345; DB 19; Best Local Similarity 100.0%; Pred. No. 3e-172; Matches 345; Conservative 0; Mismatches 0;
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Publication No. US20040191868A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
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Search completed: August 8, 2005, 14:25:04 Job time : 283.896 secs THIS PAGE BLANK (USPTO)

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Result
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Maximum DB seq length: 2000000000
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Perfect score:
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Gapop 60.0 , Gapext 60.0
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AZ122646 AQ735965	AQ462483 AY412021 CB807383 CD986398 AO562324	BG811718 CG683296 BF428261	AZ205009 CC115803 AV258645	CL385238 AG148772 CN447619 CC922148	AZ266075 AI645939
	AQ462483 HS_5 AY412021 Pan CB807383 AMGNI CD986398 QAN2 AO562324 HS_5	BG811718 daf CG683296 ZMM BF428261 daa	AZ205009 SP CC115803 NDL AV258645 AV2	Pan GUO	-
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ALIGNMENTS

Qy 1 Db	Query Match Best Local : Matches 12:	ORIGIN	Bource	מפקווראפפ	MEDLINE PUBMED COMMENT	TITLE	SOURCE ORGANISM REFERENCE AUTHORS	RESULT 1 CC331159 LOCUS DEFINITION ACCESSION VERSION KEYWORDS
121 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC 180	Query Match 37.4%; Score 129; DB 9; Length 622; Best Local Similarity 100.0%; Pred. No. 1.2e-56; Matches 129; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	/strain="standard roode" /db xref="taxon:9615" /clone lib="Dog Library" /note="Site l: BstXI; Libraries were prepared from peripheral blood"	1. 622 1. 622 /organism="Canis familiaris" /mol_type="genomic_DNA" /mol_type="genomic_DNA"	Rockville, MD 20850, USA Tel: 301-838-0200 Fax: 301-838-0208 Email: ekirknes@tigr.org Class: shotgun.	22875432 14512643 Contact: Kirkness EF The Institute for Genomic Research Department of Eukaryotic Genomics, TIGR, 9712 Medical Center Drive,	B., Delcher, A.L., Pop, M., Wang Genome: survey sequencing and 301 (5641), 1898-1903 (2003)	Canis familiaris (dog) Canis familiaris Canis familiaris Canis familiaris Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis. 1 (bases 1 to 62) 1 (kases 1 to 62) 1 (kases 1 to 62)	CE331159 622 bp DNA linear GSS 26-SEP-2003 tigr-ges-dog-17000333986568 Dog Library Canis familiaris genomic, genomic survey sequence. CE331159 CE331159.1 GI:36147469

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AUTHORS
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            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 456)
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This sequence was made by sequencing geno
                                                                  Homo
                                                                                                                 BC066281
BC066281.1
                                                                                                                                                                 Homo sapiens cDNA clone IMAGE: 6971770,
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Location/Qualifiers
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/db_xref="taxon:9606"
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RESULT 4 CD559532

DEFINITION

CD559532 456 bp mAGENCOURT 14497057 NIH MGC 195 Homo IMAGE:6971772 5', mRNA sequence.

mRNA

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EST 11-JUN-2003

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193
                                                113 ATAAAATCACCAACTGTGCA 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINI at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 17
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg, R.
Direct Submission
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Sequencing Group at the Stanford Human

Center, Stanford University School of Medicine, Stanford,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Web site:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
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                                                                                                             Conservative
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/clone_lib="NIH_MGC_195"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6971770"
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(Dickson, Mark) mcd@paxil.stanford.edu
M., Schmutz, J., Grimwood, J., Rodriquez,
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1 (bases 1 to 456)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                        A56 bp mRNA 1
AGENCOURT 14497093 NIH MGC 195 Homo sapiens
IMAGE:6971772 3', mRNA sequence.
CD559686
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Bldg. 31 Rm10A07 Bethesda, MD 20892
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Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
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Location/Qualifiers
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CD559532.1 GI:31585600
                                                                                                                                           CD559686
CD559686.1
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                 Homo sapiens
                                                                       HOMO
                                                                sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="IMAGE: 6971772"
/clone="IMAGE: 6971772"
/lab host="DH5A (T1 phage-resistant)"
/lab host="DH5A (T1 phage-resistant)"
/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
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/note="Vector: pDNR-Dual; Site_2: loxp-Sall; Site_2:
/note="Vector: pDNR-Dual; Site_2: loxp-Sall; Site_2: loxp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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|mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                db xref="taxon:9606"
                                                                                                                                           GI:31585754
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Pred. No.
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BC066279
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Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 458)

Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G., Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D., Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K., Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       National Cancer Institute / NIH
Bldg. 31 Rm.10A07 Bethesda, MD 20892
Email: cgapbs-remail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                 BC066279
BC066279.1 GI:42490901
                                                                                                                                                                                                                                                                                                BCU066279
458 bp mRNA linear HTC 12-PEB-2004
HOMO sapiens cDNA clone IMAGE:6971768, containing frame-shift
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     High quality sequence stop: 456.
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National Institutes of Health, Mammalian Gene Collection (MGC)
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Plate: IRBK1 row: g
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                                                                                                                                                                                                                                                                                     errors.
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATAAAAATCACCAACTGTGCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR-amplified using gene-specific primers to contain the complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is cDNA derived from either pooled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Biosciences/Clontech and Washington University). PCR products are directionally cloned into the loxp sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Barl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-rederick, Frederick, MD 21702). Por information on which gene each clone represents, please
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone="IMAGE:6971772"
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'mol_type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            db_xref="taxon:9606"
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Pred. No.
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                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                      113 ATAAAATCACCAACTGTGCA 133
BC066280
BC066280.1
HTC.
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Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 943:
Web site:
http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LIMI at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 15
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone="IMAGE:6971768"
/tlssue_type="PCR rescued clones"
/clone_lib="NHH_MGC_195"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Vector: pDNR-Dual"
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/lab_host="DH10B"
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                          GI:42490838
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100.0%; Pr
                                                                                                    cDNA clone
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                                                                                               IMAGE: 6971769, containing frame-shift
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SOURCE
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Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetcw, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gonaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Glbbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
                                                            113 ATAAAATCACCAACTGTGCA 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Gencenter, Stanford University School of Medicine, Stanford, CA
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Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 458)
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Submitted (03-FEB-2004) National Institutes of Health, Mammalian Submitted (03-FEB-2004) National Cancer Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This clone was selected for full length sequencing because passed the following selection criteria: matched mRNA gi: This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Web site:
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                                                                                                                                                                        Similarity
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ATAAAAATCACCAACTGTGCA 213
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                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                              /clone="IMAGE:6971769"
/tissue type="PCR rescued c
/clone_Tib="NIH_MGC_195"
/lab_host="DH10B"
/note="Vector: pDNR-Dual"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   http://www-shgc.stanford.edu
(Dickson, Mark) mcd@paxil.stanford.edu
4., Schmutz, J., Grimwood, J., Rodrique
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . 458
                                                                                                                                                                 6.1%;
                                                                                                                                 0
                                                                                                                                                                        Score 21;
Pred. No.
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                                                                                                                                    Mismatches
                                                                                                                                                                        DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                 clones"
                                                                                                                                                                                                     Length 458;
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CD559535
LOCUS
LOCUS CD559688 467 bp mRNA linear ES: DEFINITION AGENCOURT_14496964 NIH_MGC_195 Homo sapiens cDNA clone
                           CD559688/c
                                                        RESULT 9
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Best Local Similarity
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                                                                                                                              113 ATAAAAATCACCAACTGTGCA 133
                                                                                                                                                                               21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tissue Procurement: Narayan Bhat CDNA Library Preparation: Bhat Laboratory CDNA Library Preparation: Bhat Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
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On Jun 10, 2003 this sequence version replaced gi:31585603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 463)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CD559535 463 bp mRNA linear ES: AGENCOURT 14496865 NIH MGC 195 Homo sapiens cDNA clone MAGE:6971769 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: IRBK1 row: g column: 08
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                            ATAAAAATCACCAACTGTGCA 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens (human)
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                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                information on which gene each clone represents, please visit our anonymous ftp site at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
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                                                                                                                                                                        100.0%; **
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                                                                                                                                                                                                                                                               //image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
te: this is a NIH_MGC Library."
                                                                                                                                                                                             Score 21; DB 6; Pred. No. 13;
                                                                                                                                                                               Mismatches
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                     EST 19-NOV-2003
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KEYWORDS
SOURCE
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CD559690/c
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Best Local (
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                                                                                                                                                                                                                                                           113 ATAAAAATCACCAACTGTGCA 133
                                                                                                                                                                                                                                   274 ATAAAATCACCAACTGTGCA 254
                                                                                                                                                                                                                                                                                                                       21;
  CD559690
CD559690.2 GI:38453490
EST.
                                                                  CD559690 467 bp
AGENCOURT_14496838 NIH_MGC_195 H
IMAGE:6971768 5', mRNA sequence.
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Location/Qualifiers
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: IRBK1 row: g column: 09
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Bldg. 31 Rm10A07 Bethesda, MD 20892
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On Jun 10, 2003 this sequence version replaced gi:31585756.
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                 Similarity
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Tissue Procurement: Narayan Bhat
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                 (from BD Biosciences/clontech and Washington University).
PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Barl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.data Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /lab_host="DH5A (T1 phage-resistant)"
/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
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PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          clone="IMAGE:6971770"
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Pred. No.
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13;
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                                                                                                              KEYWORDS
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On Jun 10, 2003 this sequence version replaced gi:31585758.

On Jun 10, 2003 this sequence version replaced gi:31585758.

Contact: Daniela S. Gerhard, Ph.D.

Office of Cancer Genomics

National Cancer Institute / NIH

Bldg: 31 Rm10A07 Bethesda, MD 20892

Email: cgapbs-remail.nih.gov

Tissue Procurement: Narayan Bhat

CDNA Library Preparation: Bhat Laboratory

CDNA Library Preparation: Bhat Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC Clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                           113 ATAAAAATCACCAACTGTGCA 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 467)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                       470 bp mRNA linear ES' AGENCOURT 14497029 NIH MGC 195 Homo sapiens cDNA clone IMAGE:6971771 5', mRNA sequence.
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CD559687.2 GI:38453484
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                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                      Homo sapiens
                                                                                       Homo sapiens (human)
(bases 1 to 470)
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone=IMAGE:6971768"
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/tissue_type="mixed"
/lab_host="IMAGE:6971768"
/lab_host="IMAGE:195"
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/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
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loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template foor PCR is cDNA
derived from either pooled cytoplasmic polya RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Prederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/mol_type="mRNA"
/db_xref="taxon:9606"
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High quality sequence stop: 470.
Location/Qualifiers
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Bldg. 31 Rm10A07 Bethesda, MD 2
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  On Jun 10, 2003 this sequence version replaced gi:31585757.
                                                                                                                                                              Homo sapiens
                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                             EST
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CD559689.2
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/db_xref="taxon:9606"
/clone="IMAGE:6971771"
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Pred. No.
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Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MCC clone distribution information can
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National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585755.
                                                                                                                                                                                                                                                                                                                                                                                                473 bp mRNA linear ES' AGENCOURT 14496901 NIH MGC 195 Homo sapiens cDNA clone IMAGE:6971769 5', mRNA sequence.
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Plate: IRBK1 row: g column: 10
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 473)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
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/note="Wector: pDNR-Dual; Site_1: library have been
pCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for pCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/clontech and Washington University).
PCR products are directionally cloned into the loxp sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liso (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: TRBK1 row: g column: 08
High quality sequence start: 16
High quality sequence start: 16
High quality sequence start: 16
Location/Qualifiers
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                     On Jun 10, 2003 this sequence version Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH
                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 477)
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Bldg. 31 Rm10A07 Bethesda, MD 20892
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National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                          Unpublished (1999)
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/note="Wector: pDNR-Dual; Site_1: loxP-SalI; Site_2:
/note="Wector: pDNR-Dual; Site_1: library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Blosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
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ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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clone="IMAGE:6971769"
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1 (bases 1 to 478)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: Cappbs-remail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
                                                                                                  Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585602.
Context: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
                                                                                                                                                                                                                                                            Homo sapiens
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
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/mol_type="mRNA"
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214 ATAAAATCACCAACTGTGCA 234
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AGENCOURT 14496804 NIH MGC 195 Homo sapiens cDNA clone
IMAGE:6971768 5', mRNA sequence.
CD559536
CD559536.2 GI:38558953
EST.
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                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/clone | IMAGE:6971770"
/lab_host="PM5A (TI phage-resistant)"
/lab_host="PM5A (TI phage-resistant)"
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/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
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loxp-HindIII; Clones from this library have been
loxe-mplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polya RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxp sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere II and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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|tive 0;
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High quality sequence start: 17
High quality sequence stop: 489
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21; Conservative
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/note="Vector: DDNR-Dual; Site_1: loxP-Sall; Site_2:
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSag). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous fitp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/mol_type="mRNA"
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                                                           6.1%; Score 21; DB 100.0%; Pred. No. 13; tive 0; Mismatches
                                                                                             DB 6;
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Search completed: August 9, Job time : 1468.68 secs 2005, 00:13:23

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1: /cgn2_6/ptodata/1
2: /cgn2_6/ptodata/1
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/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
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US-09-451-527-87
US-09-451-527-83
US-09-451-527-84
US-09-451-527-84
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US-09-451-527-83
US-09-656-618-3
US-09-180-864-1
US-09-180-864-1
US-09-180-864-1
US-09-566-818-35
US-09-556-818-37
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34.6	34.8	35	38	90.2	90.2	90.2	90.6	90.6	90.6	123.6	125.6	140.8	141.8	144.8	144.8	145	L # O . #
10.0	10.1	10.1	11.0	26.1	26.1	26.1	26.3	26.3	26.3	35.8		40.8	41.1	42.0	42.0	42.0	£0.0
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Sequence	Sequence	Sequence	Sequence	Patent No.	Patent No.	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Sequence	polynomia
8266, Ap	15821, 4	37, App	14, App	5324640	. 5324640	78, App	5, Appl	1, Appl	5, Appl	49, App	47, App	53, App	57, App	59, App	•	55, App	•

ALIGNMENTS

ф	γQ	DЬ	Q	망	Qy	Db	Qy	מם	γQ	Query M Best Lo Matches	RESULT 1 US-09-322-40 Sequence 8 Patent No. GENERAL IN APPLICANT A
241 CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG 300	241 CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG 300	181 CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG 240	181 CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTTGTCTTTAATAAAAAAACAATAGAG 240	121 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACTTGAAGAACCAAACTGCC 180	121 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACTTGAAGAACCAAACTGCC 180	61 CATCGAACTTGGCTGATAGGCGATGGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT 120	61 CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT 120	1 TITGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCACT 60	1 TTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT 60	Match 100.0%; Score 345; DB 4; Length 345; Local Similarity 100.0%; Pred. No. 8.4e-101; es 345; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	US-09-322-409-85 US-09-322-409-85 Sequence 85, Application US/09322409 Patent No. 6471957 GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: Sim, Gek-Kee APPLICANT: Sim, Gek-Kee APPLICANT: Dreitz, Matthew J. APPLICANT: Wonderling, Ramani S. TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE PATERENCE: IM-2-C1 FILE REFERENCE: IM-2-C1 CURRENT APPLICATION NUMBER: US/09/322,409 CURRENT FILING DATE: 1999-05-28 EARLIER APPLICATION NUMBER: 60/087,306 EARLIER FILING DATE: 1998-05-29 NUMBER OF SEQ ID NOS: 154 SOFTWARE: PATENTIN VET. 2.0 SEQ ID NO 85 LENGTH: 345 TYPE: DNA CORGANISM: Canis familiaris FEATURE: NAME/KEY: CDS LOCATION: (1)(345) US-09-322-409-85

301

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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
ITITE OF INVENTION: ACID MOLECULES, AND USES THEREOF
ITITE OF INVENTION: ACID MOLECULES, AND USES THEREOF
ITITE OF INVENTION MUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 87
LENGTH: 345
I TYPE: DNA
ORGANISM: Canis familiaris
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US-09-451-527-85
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: HM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
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Local Similarity 100.0%;
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Pred. No. 8.4e-101;
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APPLICANT: Dreiz, Matthew J.

APPLICANT: Wonderling, Ramani S.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/09/451,527

CURRENT APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION NUMBER: 09/87,306

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER APPLICATION NUMBER: 09/87,306

EARLIER APPLICATION NUMBER: 0
                                                                                                                                        ; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-87
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US-09-451-527-87/c
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; LOCATION: (1)..(345)
US-09-451-527-85
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Best Local :
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LENGTH: 345
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                                                                      Query Match
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EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Sim, Gek-Kee APPLICANT: Yang, Shumin
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ORGANISM: Canis familiaris
FEATURE:
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100.0%; Score 345; DB 4; ilarity 100.0%; Pred. No. 8.4e-101; Conservative 0; Mismatches 0;
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Pred. No. 8.4e-101;
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Best Local Similarity Matches 345; Conserv

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RESULT 5
US-09-322-409-83
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Best Local Similarity
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ORGANISM: Canis familiaris
-09-322-409-83
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CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
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APPLICANT: Yang, Shumin
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 CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                              CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTTGTCTTTAATAAAAGAACACATAGAG
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; TYPE: DNA
; ORGANISM: Canis f
US-09-322-409-84
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PATENT NO. 6471957
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Vang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION UNBERR: US/09/451,527
CURRENT FILING DATE: 1999-12-01
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CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 84
LENGTH: 402
                                                                                                                                                                                                      Sequence 83, Application Patent No. 6482403
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
ITILE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
ITILE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 509/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 84
TENCATOR
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; BARLIER FILING DATE: 1999-05-28
; EARLIER APPLICATION NUMBER: 60/087,306
; EARLIER FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: PatentIN Ver. 2.0
; SEQ ID NO 83
; LENGTH: 402
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-83
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                                                                                                                            ; LENGTH: 402
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-84
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nes 345; Conservative
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tive 0; Mismatches 0;
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Patent No. 6471957
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
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CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
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APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
EILE REFERENCE: IM-2-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Canis
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: CDS
LOCATION: (29)..(430)
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                         CGCCAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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US-09-322-409-82/c
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US-09-451-527-80
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Matches
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Ureitz, Matthew J.
APPLICANT: Monderling, Ramani S.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
TILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
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LENGTH: 610
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APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANLINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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ORGANISM: Canis familiaris
-09-322-409-82
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Pred. No. 1.1e-100;
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GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.

ITILE OF INVENTION: CANINE AND FILLINE IMMUNOREGULATORY PROTEINS, NUC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER PILICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
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; EARLIER FILING DATE: 1999-05-28
; EARLIER APPLICATION NUMBER: 60/087,306
; EARLIER FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: Patentin Ver: 2.0
; SEQ ID NO 80
; EENGTH: 610
                                                                             ; LENGTH: 610
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-82
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                                                                                                                                    SOFTWARE: Pate
SOFTWARE: Pate
; SEQ ID NO 82
; SEQTH: 610
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Best Local Similarity
Matches 345; Conserv
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NAME/KEY: CDS
LOCATION: (29)..(430)
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  100.0%; ilarity 100.0%; Conservative 0
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  Score 345; DB 4;
Pred. No. 1.1e-100;
Mismatches 0;
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                                     Length 610;
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US-09-371-615A-1
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Best Local S
Matches 343
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SEQ ID NO 1
LENGTH: 405
TYPE: DNA
ORGANISM: Canis familiaris
S-09-371-615A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: METHODS AND COMPOSITIONS TITLE OF INVENTION: CANIME INTERLEUKIN 5 FILE REFERENCE: 03604001700US00 CURRENT APPLICATION NUMBER: US/09/371,615A CURRENT FILING DATE: 1999-08-10 NUMBER OF SEQ ID NOS: 8
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APPLICANT: IDEXX LABORATORIES
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                    CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 345
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Pred. No. 9.7e-100;
0; Mismatches 2;
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US-09-023-655-1236

; Sequence 1236, Application US/09023655
; Patent No. 6607879
; GENERAL INFORMATION:
; APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
; APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE
; TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, IN
STREET: 3174 PORTER DRIVE
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CURRENT FILING DATE: 1998-05-15
NUMBER OF SEQ ID NOS: 2
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 816
TYPE: DNA
ORGANISM: Homo sapiens
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Patent No. 6048726
GENERAL INFORMATION:
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APPLICANT: Karim, Aftab S.

TITLE OF INVENTION: INHIBITION OF EOSINOPHILIC INFLAMMATION
FILE REFERENCE: 09998/002001
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FOCOMPACTION
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
                                                                                                                           STATE: C
                                                                                                                                                              STREET: 3174 POI
CITY: PALO ALTO
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80.4%;
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Pred. No. 3.7e-64;
0; Mismatches 66
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APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION UMBER:
FILING DATE:
CLASSIFICATION:
ATTORNEY, AGENT INFORMATION:
ATTORNEY, AGENT INFORMATION:
REGISTRATION NUMBER: PA-0001 U
REFERENCE/DOCKET NUMBER: PA-
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Search completed: August 7, 2005, 18:43:09 Job time: 71.2587 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                189 GGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAGAACACATAGAGCGCCAAAA 248
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ALIGNMENTS

ACCESSION VERSION KEYWORDS SOURCE ORGANISM RESULT 1 BD211562 ORIGIN REFERENCE FEATURES COMMENT DEFINITION Pocus TITLE JOURNAL AUTHORS OS Canis familiaris (dog)
PN JP 2002516104-A/68
PD 04-JUN-2002
PF 28-MAY-1999 JP 2000551002
PR 29-MAY-1998 US 60/087306
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/395, PC A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475. CO7K14/54, PC C07K14/54, C07K14/705, C07K16/74 C001N33/15, C07K14/56, C07K14/705, C07K16/74 C001N33/15, C001N33/ source molecules and CC method of FH Key FT CDS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

1 (bases 1 to 345)
Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nucleic acid molecules BD211562.1 GI:33021332 JP 2002516104-A/68. Canine and feline immunoregulatory proteins, nucleic acid molecules and method of using the same. and feline immunoregulatory proteins, Canis familiaris Canis familiaris (dog) A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535, C07K14/54, C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC /organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="taxon:9615" Location/Qualifiers of using the same Location/Qualifiers (1) . . (345) . nucleic acid g

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PN JP 200
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PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395, PC A61K39/395, PC A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/53, PC C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC G07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC G07K13/15,
                                                                                          PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC and feline immunoregulatory proteins, nucleic acid CC molecules and CC method of using the same EH Key Location/Qualifiers FT source 1.345 /organism='Canis familiaris (dog)'.
                                                                                                                                                                                                                                                                                                                                                                              Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S. Canine and feline immunoregulatory proteins, nuc and method of using the same Patent: JP 2002516104-A 69 04-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

1 (bases 1 to 345)
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1 TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Canine IL-4 immunoregulatory proteins and uses the
Patent: US 6471957-A 85 29-OCT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                        CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT
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                              CGCCAAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG 300
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Pred. No. 4.8e-83;
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AR241541/c
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                                        REFERENCE
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AR254496
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KEYWORDS
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Sequence 87
AR241541
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Sequence 85
AR254496
AR254496.1
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Sim.G.-K., Yang.S., Dreitz,M.J. and Wonderling,
Canine IL-4 immunoregulatory proteins and uses
Patent: US 6471957-A 87 29-OCT-2002;
Location/Qualifiers
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                             (bases 1 to 345)
,(G.-K., Yang,S., Dreitz,M.J. and Wonderling,R. inney IL-13 immunoregulatory proteins and uses ent: US 6482403-A 85 19-NOV-2002;
Location/Qualifiers
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Pred. No. 4.8e-83;
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Best Local Similarity
Matches 345; Conserv
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AR254497
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Caniney IL-13 immunoregulatory proteins and uses th
Patent: US 6482403-A 87 19-NOV-2002;
Location/Qualifiers
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CGCCAAAAAAAAGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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                                                    CACGGGGAGGCTGTGGATAAACTATTCCAAAAACTTGTCTTTAATAAAAAGAACACATAGAG
                                                                                                                      CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
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                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/mol_type="genomic
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Pred. No. 4.8e-83;
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Best Local Similarity
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and method
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PC A61K45/
PC C07K14/
PC C07K14/
PC G01N33/15,
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1 (bases 1 to 402)
Sim, G., Yang, S., Dreitz, M.J. and Wonderling, R.S.
Canine and feline immunoregulatory proteins, nucleic acid molecule and method of using the same Patent: JP 2002516104-A 66 04-JUN-2002; HESKA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PF PR OS
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R 29-MAY-1998 US 60/087306

I GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,
                                                                                                                                           CACCAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACTTGAAGAACCAAACTGCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCCGGAAAGT 345
CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                  CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                      CACCAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                                                                                                                                                         CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT
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                                                   CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAAGAACACATAGAG
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A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
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mol_type="genomic DNA"
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Pred. No. 4.7e-83;
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BD211561/c
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and method of using the e
BD211561 GI:33021331
BD211561.1 GI:33021331
JP 2002516104-A/67
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Canis familiaris
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PE 29-MAY-1998 US 60/087306
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING
C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/39/00, A61K39/395,
C A61K39/395,
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CGCCAAAAAAAAGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                                                                                     CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC 180
                                                                                                                                                                                     CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT
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                                                    CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                  CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                      CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                                                                                                                                                                                                                            TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCCACT
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JP 2002516104-A/67
04-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="taxon:9615"
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100.0%; Pred. No. 4.7e-
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AR241539/c
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 83 29-OCT-2002;
                                   1 (bases 1 to 402)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 84 29-OCT-2002;
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
Caniney II.-13 immunoregulatory proteins and use
Patent: US 6482403-A 83 19-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                      AR254494
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                                         CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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  CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                          CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Caniney IL-13 immunoregulatory proteins and uses th
Patent: US 6482403-A 84 19-NOV-2002;
Location/Qualifiers
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AR254495
Yang, S., Sellins, K.S., Weber, E. and McCall, C. Canine interleukin-5: molecular characterization of the expression of biologically active recombinant protein J. Interferon Cytokine Res. 21 (6), 361-367 (2001)
                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
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Canis familiaris interleukin-5 m
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      Patent: U.
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                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; (Dases 1 to 610)

Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S. Canine and feline immunoregulatory proteins, nucleic and method of using the same Patent: JP 2002516104-A 64 04-JUN-2002;
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Submitted (22-DEC-2000) Immunology, Heska Corporation, Submitted Parkway, Ft Collins, CO 80525, USA
                                                                                                                                     Canis familiaris
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/product="interleukin-5"
/product="interleukin-5"
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/mol_type="mRNA"
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Pred. No. 4.6e-83;
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PD 04-JUN-2002

PF 28-MAY-1999 JP 2000551002

PR 29-MAY-1999 US 60/087306

PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,

PC A61K39/395,

PC A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535,

PC C07K14/54,

PC C07K14/54,

PC C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC G01N33/15,

PC G01N33/15,

PC G01N33/15,

PC G01N33/50, C12N15/00, A61K37/02, A61K37/66, C12N5/00 CC Canine and feline immunoregulatory proteins, nucleic acid CC method of using the same CC method of using the same Location/Qualifiers

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Patent: JP
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                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

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Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nucleic acid molecule and method of using the same
Patent: JP 2002516104-A 65 04-JUN-2002;
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12N15/09, A61X31/7088, A61X38/00, A61X38/21, A61X39/00, A61X39/395, PC A61X39/395, A61X3
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28-MAY-1999 JP 2000551002
29-MAY-1998 US 60/0873
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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Aaz55547 Canine in
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Aaf74300 Canine in
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Aaf74306 Canine in
Aat50756 Ovine IL-
Aat50755 Ovine IL-
Aaa13338 Human int
Aaf20979 Human int
Aaf20979 Human int
Aaf203104 Human DNA
Abz96673 Human int
Adp56009 Human pro
Aad161294 hIL5-P2-P
Aal61294 hIL5-P2-P
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ALIGNMENTS

RESULT 1 AAZ55550

Canine mature interleukin-5 (IL-5) cDNA.

Interleukin-5; IL-5; antibody; canine; inhibitor; immune response; immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.

14-MAR-2000 (first entry)

AAZ55550;

AAZ5550 standard; cDNA; 345

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Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline Flt-3 ligand, canine or feline CD154 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins their associated nucleic acids, specific antibodies and inhibitors may be
                                                                                                                                                          Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                   Canis familiaris.
                                                                                                                                Claim 1h; Page 226-227; 264pp; English.
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                                                                                                                                                                                                                                                    Sim G,
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AAL61294

as vaccines for therapeutic or prophylactic regulation of an

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RESULT 2
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DE Canine mature interl.
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DE Canine mature interl.
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DE Canis familiaris.
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PN W09961618-A2.
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PP 02-DEC-1999;
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PP 28-MAY-1998; 98US-1
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Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (II-5). The invention relates to canine II-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 ligand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GNCSF) and nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune cresponse in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including allergies, tumours, inflammation and graft rejection, and to increase the response from a co-administered antigen. The nucleotide sequences can also be used for the recombinant production of a protein, while nucleotide fragments are useful as probes, as amplification primers and as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug

Sequence 345 BP; 79 A; 78 C; 68 G; 120 T; 0 U; 0 Other;

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                           CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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AAZ55548 standard; cDNA; 402 BP
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Canine interleukin-5 (IL-5) cDNA coding region

14-MAR-2000 AAZ55548

(first entry)

immunoregulation; Interleukin-5; IL-5; antibody; canine; inhibitor; immune response;

ARZSSAM ARZSSAM XX ARZS XX ARZS XX ARZS XX INT DT 14-M DT 14-M DT Cani XX INT DE Cani XX INT DE Cani XX INT DE Cani XX OF INT Canis familiaris WO9961618-A2

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ID AAZ55549 standard; cDNA; 402 BP
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100.0%; Pred. No. 6e-93;
tive 0; Mismatches
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Matches 345;
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        CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG 300
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Pred. No. 6e-93;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    interleukin-5 (II-5). The invention relates to canine II-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 ligand), canine II-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and
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                                                                                                                        Conservative
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                                                                                                                Score 345; DB 3;
Pred. No. 6.9e-93;
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                                                                                                                                                                                                                                G; 155
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                           Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (II-5). The invention relates to canine II-4, canine or feline FRI-3 ligand, canine or feline CD40, canine or feline CD40 canine II-5 canine II-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, encodering antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including
                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-1998;
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                   immunoregulatory proteins preventing e.g. tumors or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wonderling
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dog; interieu inflammatory
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Claim 31; Page 46; 48pp; English
                                                  Novel canine interleukin 5 polynucleotide and polypeptides are used generating antibodies which are useful in treating allergies in dogs
                                                                                                                                                                                                                  Guo H,
                                                                                                                                                                                                                                                                       (IDEX-)
                                                                                                                                                                                                                                                                                                                             10-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2000; 2000WO-US021651
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ammatory reaction; ds.
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                                                                                                                                                                                                                  Lawton R,
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Pred. No. 6.9e-93;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pig; vaccine; cysticercosis; protective antigen;
tenial cysticercus; gamma interferon; IFN-gamma;
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Pred. No. 5.
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This invention describes a novel nucleic acid vaccine for preventing and curing human and pork cysticercosis. The invention involves the formation of a eukaryotic expression plasmid from fusion transcript expression unit

Page 9; 21pp; Chinese.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              consisting of three protective antigen genes (cC1, cC3 and cC4) of pig tenial cysticercus and coexpression unit of related cell factor gamma interferon (IFN-gamma) and pork interfeukin 5 (IL-5)] genes. The production and purification process of said nucleic acid vaccine is simple and convenient, the physical and chemical properties of the vaccine are stable, and the vaccine is easy to store and transport, and possesses effective immunological protective function for human and pig cysticercosis. This sequence represents the pig IL-5 gene used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 838 BP; 280 A; 148 C; 171 G; 239 T; 0 U;
           Novel canine interleukin 5 polynucleotide and polypeptides are used for generating antibodies which are useful in treating allergies in dogs.
                                                                                                                                            10-AUG-1999;
                                                                                                                                                                                                     15-FEB-2001.
                                                                                                                                                                                                                                                                                                       Dog; interleukin-5; IL-5; allergy; cancer;
                                                                                                                                                                                                                                                                                                                                  Canine interleukin-5 coding sequence #3.
                                                                                                                                                                                                                                                                                                                                                                04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                      AAF74306 standard; DNA; 393
                                                                                                                                                                       09-AUG-2000; 2000WO-US021651.
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                                                                                                                                                                                                                                                                                         reaction;
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                                                                                                                                            99US-00371615
                                                                                   Mermer B,
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90.1%;
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Mismatches 34;
                                                                                   Aiyappa
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                                                                                                                                                                                                                                                                                                       gene therapy;
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RESULT 10
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ID AAT50756
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Cytok
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XX WPI;
DR P-P8E
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                         Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12; livestock; cow; stress; transport; vaccine adjuvant; veterinary; cai immunosuppression; allergy; reproductive system; growth; early matu: antibody; diagnosis; immunopotentiator; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one version of the IL-5 coding sequence shown in the specification
             Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock
                                                                                                                                                                            14-JUN-1995;
27-OCT-1995;
                                                                                                                                                                                                                                                                                                                              Ovis aries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-OCT-2003
24-SEP-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 35; 48pp; English
                                                                                                                                                                                                                             14-JUN-1996;
                                                                1997-077528/07
DB; AAW08479.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA.
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95AU-00006244.
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RESULT 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CC livestock (esp. cows and sheep), particularly where the animals are CC stressed, e.g. during transport. IL-5 and IL-12 can also be used as CC adjuvants in vaccines for veterinary use (partic. weakly immunogenic CC subunit or synthetic peptide vaccines). They may also be used to treat CC cancer, immunosuppression and allergy, to enhance/suppress the CC reproductive system and to promote growth or early maturity. Optionally CC interleukin can be delivered from constructs or delivery cells and CC infection. The interleukins are immunopatentiators, especially IL-5 CC promotes growth of early haematopoietic progenitor cells and generation of cytotoxic cells from thymocytes, also it stimulates production and CC induces production of IgM and IgA (in synergism with bacterial endotoxin). IL-12 C induces production of gamma-interferon by, and proliferation of, T and NK CC cells and increases the (non-)specific cytolytic lymphocyte response. The CC genetic constructs can also be used for in vitro production of IL-5 or -10. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 300
                                                                                                                                                                                                                                       17-OCT-2003
24-SEP-1997
                                                                                                      Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12; livestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer; immunosuppression; allergy; reproductive system; growth; early maturity; antibody; diagnosis; immunopotentiator;
                                                                                                                                                                                                  Ovine IL-5 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 399
Key
                                  Ovis aries
                                                                   secretion; IgM;
                                                                                                                                                                                                                                                                                               AAT50755;
                                                                                                                                                                                                                                                                                                                                 AAT50755 standard; DNA; 520
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequences given in AAT50755-56 encode ovine interleukin-5 (IL-5) ne IL-5 or IL-12 are used to treat and/or prevent infections in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 183
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                                                                                        haematopoietic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCA 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAAACTCTGCTGATAGGTGATGGGAACTTGATGATTCCTACTCCTCAGCATACAAATCA 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGGATGCTGTGAAAAAAATATTCCGAAACTTGTCTTTAATAAAAGAATACATAGACCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAAAAAAAGGAAGTGTGGAGGAGAAAGATGGAGAGTGAAACAATTCCTCGACTACCTGCA
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                                                                                                                                                                                                                                       (revised)
(first entry)
Location/Qualifiers
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87.7%;
                                                                   progenitor cell; cytotoxic cell; thymocyte;
bacterial endotoxin; gamma-interferon; ss.
                                                                                                                                                                                                                                                                                                                                     ВP
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Pred. No. 6.1
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В Ś 밁 Ś 밁

CCAACTATGCATTGAAGAAGTCTTTCAGGGAATAGACACATTGAAGAATCAAACTGCACA CCAACTGTGCATTAAAGAAGTTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCA 182 TCAAACTCTGCTGATAGGTGATGGGAACTTGATGATTCCTACTCCTCAGCATACAAATCA TCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAAATAAAAATCA 122

278

218

158

X

159 123

63 99

TGCTGTAGAAAGTACCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACGCA

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S
                                                                                                                                   The sequences given in ANT50755-56 encode ovine interleukin-5 (IL-5). CC Ovine IL-5 or IL-12 are used to treat and/or prevent infections in CC Ovine IL-5 or IL-12 are used to treat and/or prevent infections in CC livestock (esp. cows and sheep), particularly where the animals are CC adjuvants in vaccines for veterinary use (partic. weakly immunogenic subunit or synthetic peptide vaccines). They may also be used to treat cancer, immunosuppression and allergy, to enhance/suppress the CC reproductive system and to promote growth or early maturity. Optionally cinterleukin can be delivered from constructs or delivery cells and CC infection. The interleukins are immunopotentiators, especially IL-5 promotes growth of early haematopoietic progenitor cells and generation of cytotoxic cells from thymocytes, also it stimulates production and CC induces production of gamma-interferon by, and proliferation of, T and NK cells and increases the (non-)specific cytolytic lymphocyte response. The genetic constructs can also be used for in vitro production of IL-5 or - 12 (Indices of treated to the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be used for in vitro production of IL-5 or - 12 (Indices of the constructs can also be us
                                              Matches
                                                                     Query Match
Best Local
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                                                                                                                                 Sequence 520 BP; 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-JUN-1995;
27-OCT-1995;
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34857
                                                     inflammation. The ON can have antiinflammatory, antiallergic, antiaschmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the college of decreations which may metastasise to the lungs, including the second of the adenosine content of the college of decreations of the adenosine content of the college of decreations which heating the adenosine content of the college of decreations which heating the adenosine content of the college of decreations which heating the adenosine content of the college of decreations which heating the college of decreations are content of the college of decreations.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy;
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represent

Oligonuclectide comprising non-natural internucleoside linkage, useful for inhibiting interleukin-5 expression and treating inflammatory

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human interleukin-5 (IL-5) nucleotide sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interleukin-5; IL-5; inflammatory
                                                                                                                       JK,
                                                                                                                                                                          WELTMAN
KARIM A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 conjunctivitis; inhibitor; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACTGTGGAAAGACTÁTTCAAAAACTTGTCCTTAATAAAGAAATACATTGACGGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGCCAAAA
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                                                                                                                          Karim AS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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80.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           allergic
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    asthma; eczema;
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RESULT 14
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents the human interleukin-5 (IL-5) encoding nucleotide, sequence. Interleukin-5 is involved in eosinophilic inflammation and inflammatory disorders. The present invention relates to an IL-5 antisense oligonucleotide (see AAA1337) which inhibits the expression of IL-5. The antisense oligonucleotide has at least one non-natural internucleoside linkage. The oligonucleotide is able to inhibit IL-5 secretion in a dose dependent manner, and is useful for inhibiting IL-5 expression and therefore treating inflammatory diseases, asthma, allergic rhimitis, allergic conjunctivitis and inflammatory skin diseases
                                                                                                                             respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diseases, asthma, allergic rhinitis,
                                                 WO200062736-A2
                                                                                                                                                                                                                                  human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory;
                                                                                                                                                                                                                                                      Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation;
                                                                                                                                                                                                                                                                                                       Human low adenosine antisense oligonucleotide related sequence #2546
                                                                                                                                                                                                                                                                                                                                               14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                 AAF20979 standard; DNA; 816
                                                                                                                                                                                                    immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration;
                                                                               Bapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTGTGGAAAGACTATTCAAAAACTTGTCCTTAATAAAGAAATACATTGACGGCCAAAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCACGGGGA 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAAATTCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCATCGAAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT
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                                                                                                                                                                                                                                                                                                                                              (first
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                                                                                                                                                                                                                                                                                                                                              entry)
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80.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; 137
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 231.4;
Pred. No. 7.6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66;
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129 170

GTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCACGGGGA 188

GGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGCCAAAA GTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAAGGGGG

248

349

TTGGCTGATAGGCGATGGGAAACCTGATGATTCCTACTCCTGAAAATAAAAATCACCAACT AGAAATTCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCATCGAAC 169 AGAAAATCCCATGAATAGACTGGTGGCAGAGAGCCTTGACACTGCTCTCCCACTCATCGAAC 68

128

229

TCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCACCAACT

230

밁 S 문

Matches

271;

Conservative

0

9

110

69

Query Match Best Local Similarity

67.1**%**; 80.4**%**;

Score 231.4; Pred. No. 7.6e 0; Mismatches

.6e-59; DB 66; · ω

Indels Length 816;

0;

Gaps

0

Sequence 816 BP; 277

A; 137 C; 164 G; 238 T; 0 U;

0 Other;

S В ∙8 뭐

TACTGTGGAAAGA

350

AAAAAAGTGTGGAGAAGAAAGACGGAGAGTAAACCAATTCCTAGACTACCTGCAAGAGTT AAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAAGTATT 308

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CC lung/respiratory disorders and malignancies, such as stimulating and CC activating peptide factors and transmitters, transcription factors, cimmunoglobulins and antibodies, antibody receptors, cytokines and CC chemokines, endogenously produced specific and non-specific enzymes, CC binding proteins, adhesion molecules and their receptors, cytokine and CC chemokine receptors, adenosine receptors, bradykinin receptors, central CC receptors, CNS and peripheral nervous and non-nervous system (CNS) and peripheral nervous and non-nervous system cC receptors, binding proteins and malignancy associated proteins. The CC including respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, allergy(ies) and/or serice or condition selected from pulmonary vasoconstriction, inflammation, CC condition selected from pulmonary vasoconstriction, inflammation, construction fespecially pulmonary distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary transplantation rejection, pulmonary disease (COPD), cand/or cancer. AAF18434 to AAF21543 represent human polynucleotide from entered to the exemplification of the present human polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYEC-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonuclectides and compositions (I) comprising them. In the antisense oligonuclectides the A is replaced by a 'Universal' or alternative base.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-MAR-2000; 2000WO-US008020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and respiratory obstructions.
                                         present
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                                           invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page 788; 1592pp; English
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ADG33104
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention relates to novel methods for diagnosing and monitoring autoimmune and chronic inflammatory diseases. Specifically, it refers to the identification of genes that have a clinical utility as diagnostic tools for the management of, in particular, patients with systemic upus erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the present invention describes a method for determining the levels of multiple differentially expressed genes of a patient, in a concerted manner, in order to achieve an improved diagnostic assay with sensitivity and specificity for the disease in question. As such, these genes are useful for the diagnosis of various other inflammatory disorders including cholecystitis, Sjogren's disease, CREST syndrome, sclerosems, ankylosing spondylitis, ulcerative colitis, primary sclerosis. This polynucleotide is a DNA sequence representing human mRNA that is
                                                                                                                                                                                                                        Query Match
Best Local S
Matches 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diagnosing or monitoring autoimmune and chronic inflammatory diseases, such as rheumatoid arthritis, systemic lupus erythematosus, ulcerative colitis, psoriasis and asthma by detecting the expression level of one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 systemic lupus erythematosis; rheumatoid arthritis; cholecystitis; Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondylitis; ulcerative colitis; primary sclerosing cholangitis; appendicitis;
                                                                                                                                                                                                                                                                                                                                                                                                                differentially expressed in patients with of the invention.
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                                                                                                    AGAAATTCCCCACAAGTGCATTGGTGAAAGAGACCTTGGCACTGCTTTCTACTCATCGAAC
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                                                                                                                                                     GGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGCCAAAA 248
                                                                                                                                                                                                                       GTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCACGGGGA 188
                               TCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 345
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                                                                                                                                                                                          GTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAAGGGGG
                                                             AAAAAAGTGTGGAGAAGAAGACGGAGAGTAAACCAATTCCTAGACTACCTGCAAGAGTT
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Search completed: August 8, 2005, 09:19:50 Job time : 231.259 secs

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Database :
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Maximum Match 100%
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/cgn2 6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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345	345	345	345	345	345	345	Score
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US-10-787-382-9	US-10-262-439-87	US-10-262-439-85	US-10-218-654-87	US-10-218-654-85	US-09-755-633-11	US-09-755-633-9	DB ID
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Sequence 18, Appl Sequence 19, Appl Sequence 1, Appli Sequence 1, Appli	e 10, 7 e 12, e 14, e 14, e 14, 18, 19, 19, 19, 19, 19, 19, 19, 19, 19, 19	e e 90, e e 85, e e 87,	N	7, 2 8, 2 4, Ap 6, Ap 80, 80,	e 11, 7, 7, 8, 8, 7, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8,

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NUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. US200
Query Mátch
Best Local Similarity
                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1 CURRENT APPLICATION NUMBER: US/09/755,633 CURRENT APPLICATION NUMBER: US/09/755,633 PRIOR APPLICATION NUMBER: 09/322,409 PRIOR APPLICATION NUMBER: 09/322,409 PRIOR FILING DATE: 1999-05-28
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                                                                             NAME/KEY: CDS
LOCATION: (1)..(345)
                                                                                                                      LENGTH: 345
TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
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US20020127200A1
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  Score 345; DB 9; Length 345; Pred. No. 1.5e-94;
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; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
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; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-755-633-11
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CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
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Best Local Similarity
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                                                          CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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McCall, Catherine A.
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US-10-218-654-85
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APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELLINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: CACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/99/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOPTWARE: Patentin Ver. 2.0
SEQ ID NO 85
LENCTUR 245
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Publication No. US20030099609A1
GENERAL INFORMATION:
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NAME/KEY: CDS
LOCATION: (1)..(345)
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TYPE: DNA
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                       CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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RESULT 4
US-10-218-654-87/c
US-10-218-654-87/c
; Sequence 87, Application US/10218654
; Publication No. US20030099609A1
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
; APPLICANT: Yang, Shumin

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CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOPTWARE: PATENTIN Ver. 2.0
SEQ ID NO 87
LENGTH: 345
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; TYPE: DNA
; ORGANISM: Canis familiaris
US-10-218-654-87
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                                                                                CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR PPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 85, Application US/10262439 Publication No. US20030143196A1 GENERAL INFORMATION:
SOFTWARE: PatentIn Ver.
SEQ ID NO 85
LENGTH: 345
TYPE: DNA
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APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
APPLICANT: MONDER SIMPLE SAND FELLINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
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TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
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RESULT 6
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                                                                                                                                                                                                     ; LENGTH: 345
; TYPE: DNA
; ORGANISM: Canis familiaris
US-10-262-439-87
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                                                                                                                                                                                                                                                                              SOFTWARE: Pa
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                                                                                                                                 Matches
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Best Local Similarity
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Best Local Similarity
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APPLICANT: Yang, Shumin
APPLICANT: Unceitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC FILE REFERENCE: IM-2.COLD MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2.COLD MOLECULES, AND USES THEREOF
                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
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                                                        TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACT 286
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No. 1.5e-94;
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Pred. No. 1.5e-94;
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Best Local S
Matches 345
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Publication No. US20040191868A1
GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: CDS
LOCATION: (1)..(345)
1-10-787-382-9
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PRIOR FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
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CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
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CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
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100.0%; Pred. No. 1.5e-94;
tive 0; Mismatches 0;
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US-09-755-633-7

Sequence 7, Application US/09755633
Patent NO. US20020127200A1
GENERRAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: WcCall, Catherine A.
APPLICANT: WcCall, Catherine A.
APPLICANT: WCCALL, CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633

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APPLICANT: WcCall, Catherine A.

APPLICANT: WcCall, Catherine A.

APPLICANT: WcCall, Catherine A.

APPLICANT: Wcber, Eric R.

APPLICANT: Weber, Eric R.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1

CURRENT APPLICATION NUMBER: US/10/787,382

CURRENT FILING DATE: 2004-02-24

PRIOR APPLICATION NUMBER: US/09/755,633

PRIOR APPLICATION NUMBER: US/09/755,633

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21

SEQ ID NO 11

LENGTH: 345

TYDE: DNA
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; ORGANISM: Canis familiaris
US-10-787-382-11
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Best Local Similarity
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CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT
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100.0%; Pred. No. 1.5e-94;
vative 0; Mismatches 0;
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GENERAL INFORMATION:

APPLICANT: Yang, Shumin

APPLICANT: McCall, Catherine A.

APPLICANT: McCall, Catherine A.

APPLICANT: Meber, Eric R.

ITITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC

ITITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C1-C1

CURRENT APPLICATION NUMBER: US/09/755,633

CURRENT FILING DATE: 2001-01-05

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306
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PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1996-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 7
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                                                                                                                                                                       ; SOFTWARE: PatentIn Ver. 2.; SEQ ID NO 8
; LENGTH: 402
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-755-633-8
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US-09-755-633-8/c
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; ORGANISM: Canis familiaris
US-09-755-633-7
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                                                                    Query Match
Best Local Similarity
Matches 345; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8, Application US/09755633
Patent No. US20020127200A1
                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 402
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TTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCCTTGACACTGCTCTCCACT
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                                                                            Conservative
                                                                      100.0%; Score 345; DB 9; Length 402; 100.0%; Pred. No. 1.7e-94; tive 0; Mismatches 0; Indels
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CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR PILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ. ID NOS: 154
SOFTWARE: PALENTIN Ver. 2.0
SEQ ID NO 83
LENGTH: 402
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Sequence 83, Application US/10218654

Publication No. US20030099609A1

GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Natthew J.
FIILE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1

FILE REFERENCE: IM-2-C1

COURSENT ADDITORATION UNIVERSE IN (10/10 664)
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; ORGANISM: Canis familiaris
US-10-218-654-83
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Best Local Similarity
Matches 345; Conserv
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                                                                                                                                                   CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACACATAGAG 240
                                                                                                                                                                                                                                                   CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGAACACATTGAAGAACCAAACTGCC 180
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                           CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                            CGCCAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG 300
                                                                                                                                                                                                                                                                                                                       CATCGAACTTGGCTGATAGGCGATGGGAACCTGATGATTCCTACTCCTGAAAATAAAAAT 177
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                                                                                                                            CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
                                                                                                                                                                                                                       CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 345; DB 14; ilarity 100.0%; Pred. No. 1.7e-94; Conservative 0; Mismatches 0;
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Indels Length 402;

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Gaps

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357

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CAAGTATTTCTTGGTGTAATAAACACCGGAGTGGACACCGGAAAGT 345

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; SEQ ID NO 84
; LENGTH: 402
; TYPE: DNA
; ORCANISM: Canis familiaris
US-10-218-654-84
                                                                                                                                                                                                                                                                                                   RESULT 13
US-10-262-439-83
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CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOPTWARE: Patentin Ver. 2.0
                   Sequence 83, Application US/10262439

Publication No. US20030143198A1

GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Protect, Matthew J.
APPLICANT: Monderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 345; DB 14; Best Local Similarity 100.0%; Pred. No. 1.7e-94; Matches 345; Conservative 0; Mismatches 0;
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Publication No. US20030099609A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Vang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: WONDERING, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/262,439
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 CAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 CGCCAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT PILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/10/262,439
CURRENT PILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: 09/32,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-29
NUMBER OF SEQ ID NOS: 174
COCUMENT DATE: 1988-05-29
NUMBER OF SEQ ID NOS: 174
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PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 83
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US-10-262-439-84
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Best Local Similarity
Matches 345; Conserv
                                                                                  SOFTWARE: PatentIn Ver. SEQ ID NO 84
             LENGTH: 402
TYPE: DNA
ORGANISM: Canis
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Pred. No. 1.7e-94;
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100.0%;

Score 345;

DB 15;

Length

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NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 402
; TYPE: DNA
; ORGANISM: Canis familiaris
US-10-787-382-7
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APPLICANT: Yang, Shumin

APPLICANT: Weber, Eric R.

APPLICANT: Weber, Eric R.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/09/755,633
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 345; DB 19; Best Local Similarity 100.0%; Pred. No. 1.7e-94; Matches 345; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 7, Application US/10787382 Publication No. US20040191868A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/087,306 PRIOR FILING DATE: 1998-05-29
181 CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG
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                                                                                        121 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC 180
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CE331159
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AL060243 Drosophil BG543026 602570858 CE510121 tigr-gss- CE5510121 Thip-gss- CC567321 CH240 441 AA560540 vll19f05.x CB094467 hz70002.b AL076645 Drosophil BQ526053 NISC_n014 BX707130 BX707130 BX707130 BX707130 BX773491	CD087271 MC1-0036T AZ370501 1M0121K03 AG405650 Mus muscu BJ328562 BJ328562 BJ328648 BJ328648

ALIGNMENTS

PUBMED REFERENCE AUTHORS RESULT 1 AY412020 LOCUS DEFINITION REFERENCE AUTHORS SOURCE ORGANISM ACCESSION VERSION KEYWORDS ORIGIN FEATURES COMMENT TITLE Query Match Best Local TITLE Matches 271; JOURNAL JOURNAL gene source 14671302 (bases 1 to 405) (Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Direct Submission Direct Submission Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 405) Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Inferring nonneutral evolution from human-chimp-mouse orthologous AY412020 405 bp DNA Homo sapiens IL5 gene, VIRTUAL TRANSCRIPT, them based on alignment. Location/Qualifiers gene trios Science 302 (5652), 1960-1963 (2003) AY412020.1 GI:39767985 genomic Homo sapiens Homo sapiens (human) Similarity 67.1%; ilarity 80.4%; Conservative sequence was made by sequencing survey sequence /organism="Homo sapiens" /mol_type="genomic DNA" /db_xref="taxon:9606" /gene="IL5" /locus_tag="HCM4418" Score 231.4; DB 9; Pred. No. 1e-53; 0; Mismatches 66; genomic exons and ordering Indels Length partial sequence, linear GSS 16-DEC-2003 0 Gaps

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9 AGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCCACTCATCGAAC

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RESULT 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (1999)
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
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AGENCOURT 14497057 NIH MGC 195 Homo
IMAGE:6971772 5', mRNA sequence.
CD559839
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Plate: IRBK1 row: g column: 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              National Institutes of Health, Mammalian Gene Collection (MGC
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
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                                                                                                                                                                                                                                                                                                                                                          quality sequence stop: 456.
Location/Qualifiers
                                               /clone="IMAGE:6971772"
/tissue_type="mixed"
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/clone lib="NIH MGC 195"
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loxP-HindIII; Clones from this library have been
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from MCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/clontech and Washington University).
                 PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr.
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Earl Bere III and Hongling Liao
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Query Match
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TCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT
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National Cancer Institute / NIH
Bldg. 31 Rm1DA07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.B. Consortium/LLNL at: Unpublished (1999)
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics http://image.llnl.gov Plate: IRBK1 row: g column: 11 High quality sequence stop: 456. AGENCOURT 14497093 NIH_MGC_195 Homo IMAGE:6971772 3', mRNA sections CDEECCO NIH-MGC http://mgc.nci.nih.gov/. National Institutes of Health, Mammalian Gene Collection (MGC) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 456) Homo sapiens Homo sapiens (human) EST CD559686 CD559686.1 /organism="Homo sapiens" /mol_type="mRNA" /db_xref="taxon:9606" /clone="IMAGE:6971772" Location/Qualifiers mRNA 1 o sapiens linear cDNA clone EST 11-JUN-2003 Ď,

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                    On Jun 10, 2003 this sequence version replaced gi:31585755 Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH Bldg. 31 Rm10A07 Betheeda, MD 20892
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AGENCOURT 14497029 NIH MGC 195 Homo
IMAGE:6971771 5', mRNA sequence.
CD559687
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/clone lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-SalI; Site_2:
/note="Vector: pDNR-Dual; Site_1: loxP-SalI; Site_2: loxP-HiddII; Cloned from the complete open reading frame (based on known gene sequences complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is cDNA derived from either pooled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please
cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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High quality sequence stop: 470.
Location/Qualifiers
CD559533 492 bp mRNA linear ES AGENCOURT 14496993 NIH MGC 195 Homo sapiens cDNA clone IMAGE:6971771 5', mRNA sequence.
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Bldg. 31 Rm10A07 Bethesda, MD 20892
Bmail: cgapbs-remail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; V
Mammalia; Butheria; Primates; Catarrhini;
1 (bases 1 to 492)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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                                                                                                                                                             GTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCACGGGGA 188
TACTGTGGAAAGACTATTCAAAAACTTGTCCTTAATAAAGAATACATTGACGGCCAAAA
                                                  GGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGCCAAAA 248
                                                                                                        GTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAAGGGGG
                                                                                                                                                                                                                   TCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAATCACCAACT
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Location/Qualifiers
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/lab host="DNR-Dual; Site 1: loxP-Sall; Site 2:
/clome_lib="NIH_MGC_195"
/clome_lib="NIH_MGC_195"
/note="Vector: DNR-Dual; Site 1: loxP-Sall; Site 2:
/note="Vector: DNR-Dual; Site 3: loxPall; Site 3: l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        information on which gene each clone represents, please visit our anonymous fitp site at ftp://image.lnln.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:9606"
/clone="IMAGE:6971771"
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/mol_type="mRNA"
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, D., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
Direct Submission
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
Adams, M.D. and Cargill, M.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
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GSS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Science 302 (5652),
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                                                                             TACTGTGGAAAGACTATTCAAAAACTTGTCCTTAATAAAGAAATACATTGANGGCCAAAA
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                                                                                                                                                                                                                                                                     TCTGCTAATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCACCAACN 185
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/mol_type="genomic DNA"
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: IRBKZ row: g column: 10
High quality sequence start: 107
High quality sequence stop: 353.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CD559608.2 GI:38558942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mammalia; Eutheria;
                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAAAGTGTGGAGAAGAAGACGGAGAGTAAACCAATTCCTAGACTACCTGCAAGAGTT 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens (human)
                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                   /db xref="texon:9606"
/clone="IMAGE:6971867"
/tissue_type="mixed"
/lab host="UH5A (TI phage-resistant)"
/lab host="UH5A (TI phage-resistant)"
/clone_lib="NIH_MGC_195"
/note="Wector: pDNR-Dual; Site_1: loxP-SalI; Site_2:
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq! Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Blosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 2702). For
                                                                                                                                                                                                              information on which gene each clone represents, please visit our anonymous ftp site at ttp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Homo sapiens"
/mol_type="mRNA"
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                                                                                                            64.5%;
78.9%;
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Primates;
                                                                                   0
                                                                                 Score 222.4; DB 6;
Pred. No. 3.4e-51;
0; Mismatches 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       replaced gi:31585676
                                                                                      Indels
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AUTHORS
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VERSION
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ORGANISM
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JOURNAL
                                                                                                                                                                                                                REMARK
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,

Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., wang, J., Hsieh, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

MCKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A. M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,

Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,

Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     407
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
Tissue Procurement: Brat Laboratory
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
                                                                                                                                                                                                                                                                        Direct Submission

Submitted (03-PEB-2004) National Institutes of Health, Mammalian Gene Collection (MCC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A.
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456 bp mRNA linear HTC 12-FE: Homo sapiens cDNA clone IMAGE:6971770, containing frame-shift
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                   Contact: MGC help desk
                                                                                                                                                                                                                NIH-MGC Project URL: http://mgc.nci.nih.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BC066281.1
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      Genome
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AUTHORS
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SOURCE
ORGANISM
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CD559688/c
LOCUS
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                                                                                                                                                                                                                                                                                                                                             AGENCOURT 14496964 NIH MGC 195 Homo sapiens IMAGE:6971770 5', mRNA sequence.
Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585756
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
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This clone was selected for full length sequencing because passed the following selection criteria: matched mRNA gi: 2
This clone has the following problem: frame shifted.
Location/Qualifiers
                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 467)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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R. M.
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/mol type="mRNA"
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/clone="IMAGE:6971770"
/tissue_type="PCR rescued clones"
/clone_tib="NIH_MGC_195"
/lab_host="DH10B"
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(Dickson, Mark) mcd@paxil.stanford.edu
M., Schmutz, J., Grimwood, J., Rodriquez,
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Pred. No. 8.4e-51;
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RESULT 10 CD559534

DEFINITION

CD559534 478 bp mRNA linear ES' AGENCOURT_14496928 NIH_MGC_195 Homo sapiens cDNA clone IMAGE:6971770 5', mRNA sequence.

EST 26-NOV-2003

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High quality sequence start: 11
High quality sequence stop: 467.
Location/Qualifiers
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Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: IRBK1 row: g column: 09
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TCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGT
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/lab host="DMSA (TI phage-resistant)"
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/clone_lib="NIH_MGC_195"
/clone="Vector: pDNR-Dual; Site_1: loxp-SalI; Site_2:
/note="Vector: pDNR-Dual; Self-salI; Site_2: loxp-salI; Site_2: 
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/db_xref="taxon:9606"
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/mol_type="mRNA"
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REFERENCE
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Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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Office of Cancer Genomics
National Cancer Institute / NIH
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                             GTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCACGGGGA 188
                                                                                      GTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAAGGGGG
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quality sequence start: 3
quality sequence stop: 478.
Location/Qualifiers
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/(db xref="caxon:9606"
/(clone="IMAGE:6971770"
/tissue_type="mixed"
/lab host="DHSA (T1 phage-resistant)"
/(alone lib="NIH MGC 195"
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/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 27722). For
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        information on which gene each clone represents, please visit our anonymous ftp site a ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
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/mol_type="mRNA"
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Pred. No. 8.4e-51;
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Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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Clone distribution: MGC clone distribution information can be foun through the I.M.A.G.E. Consortium/LLNU at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 15 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032 This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                         cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
cDNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
Web site:
http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
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Contact: MGC help desk
Email: cgapbs-remail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 458)
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RESULT 12
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           RS Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Strausberg, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetcw, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.M.,
Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Boutfard, G.G., Blakeley, R.M., Touchman, J.W., Green, B.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Schmerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
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/tissue_type="PCR rescued
/clone_lib="NIH_MGC_195"
/lab_host="DH10B"
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/db_xref="taxon:9606"
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Primates;
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IMAGE:6971769,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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Direct Submission
Submitted (03-FEB-2004) National Institutes of Health, Mammalian Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Gene Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Tractifute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiNL at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 16
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
CDNA Sequencing by: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 941
Web site: http://www-shgo.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH-MGC Project URL: http://mgc.nci.nih.gov
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                                   TTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT 345
                                                                                                                                                 AAAAAAGGTGTGCAGGAGAAAGATGGAGAGTGACAAAGTTCCTAGACTACCTGCAAGTAT
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/clone_Tib="NIH_MGC_195"
/lab_host="DH10B"
/note="Vector: pDNR-Dual"
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/db_xref="taxon:9606"
/clone="IMAGE:6971769"
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National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
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National Institutes of Health, Mammalian Gene Collection (MGC)
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71; Conservative
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CDNA Library Arrayed by: The 18.6.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
GGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAGCGCC-AAA 247
                                                                                                                                                                                                                                                                                  GTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCCACGGGGA 188
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/lab_host="DH5A (T1 phage-resistant)"
/clone_lib="NIH_MGC_195"
/clone_lib="NIH_MGC_195"
/clone="Wector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
/note="Wector: pDNR-Dual; Site_1: loxP-Sall; Site_2: loxP-Sa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . 463
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80.2%;
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Primates;
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Pred. No. 1.2e-50;
Mismatches 66; Indels 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  riate: IRBK1 row: g column: 08
High quality sequence start: 16
High quality sequence stop: 473.
Location/Qualifiers
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Bldg. 31 Rm.10A07 Bethesda, MD 20892
Email: cgapbs-remail.nih.gov
Tissue Procurement: Narayan Bhat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 473)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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EST.
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Plate: IRBK1 row: g column: 08
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
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                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="mixed"
/lab host="DHSA (TI phage-resistant)"
/lab host="DHSA (TI phage-resistant)"
/clone lib="NIH MGC 195"
/clone Lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-SalI; Site_2:
/note="Vector: policy of the control of the
                           PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.lini.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
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Query Match Best Local Similarity

63.9%;

Score 220.4; DB 6; Pred. No. 1.2e-50;

Length 473;

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Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat L.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MCC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: IRBK1 row: g column: 07
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On Jun 10, 2003 this sequence version replaced gi:31585604.
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
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National Institutes of Health, Mammalian Gene Collection (MGC)
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Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous fitp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."
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ALIGNMENTS

3′UTR	5'UTR CDS	mRNA	Bource	JOURNAL FEATURES	TITLE	AUTHORS	PEEEBENCE	MEDLINE	JOURNAL	TITLE	AUTHORS	aONagaaaa	ORGANISM	KEYWORDS	DEFINITION ACCESSION VERSION	RESULT 1 AF331920
/note="1L-5" /codon_start=1 /product="interleukin-5" /protein_id="AAL10716.1" /protein_id="AAL10716.1" /db_xref="0(1.15919.83" /tranelation="MRMILINISILALGAAYVSAFAVENPMNRLVAETLTLLSTHRTWL IGDGNLMIPTENKHQLCIKEVFQGIDTLKNQTAHGBAVDKLFQNLSLIKEHIERQK KRCAGEMRATYKFLDYLQVFLGVINTEWTPES" 1622. 1658	126 126 join(27170,374406,12761404,15231621)	<pre>/organism="Canis familiaris" /mol type="genomic DNA" /db_xref="taxon:9615" join(1170,374406,12761404,15231658) /product="interleukin-5"</pre>	11658	Submitted (22-DEC-2000) Immunology, Heska Corporation, 1613 Prospect Parkway, Ft Collins, CO 80525, USA Location/Oualifiers		Yang, S.	11440633	21334408	expression of biologically active recombinant protein J. Interferon Cytokine Res. 21 (6), 361-367 (2001)	Canine interleukin-5: molecular characterization of the gene and	Yang.S. Selling.K.S. Weber.E. and McCall.C.	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Pissipedia; Canidae; Canis. 1 (hacea to 1658)	familiaris	Canie familiarie (dog)	AF331920 1658 DP DNA INTEGE MAM 04-0-17-2001 Canis familiaris interleukin-5 gene, complete cds. AF331920 AF331920.1 GT:15919182	

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                                              Direct Submission
Submitted (22-DEC-2000) Immunology, Heska Corporation,
Prospect Parkway, Ft Collins, CO 80525, USA
Location/Qualifiers
                                                                                                                                                        Yang, S., Sellins, K.S., Weber, E. and McCall, C. Canine interleukin-5: molecular characterization of the expression of biologically active recombinant protein J. Interferon Cytokine Res. 21 (6), 361-367 (2001)
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Canis familiaris interleukin-5 p
AF331919
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Canis familiaris
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
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PC GOIN33/50,C12N15/00,A61K37/02,A61K37/66,C
and feline immunoregulatory proteins, nucleic
molecules and
CC method of using the same
FH Key Location/Qualifiers
FT CDS (29) (410)
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OS Canis familiaris (dog)

N J 2002516104-A/64

PD 04-JUN-2002

PF 28-MAY-1999 JP 2000551002

PF 29-MAY-1998 US 60/087306

PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING I C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395, PC A61K39/395,

PC A61K39/395,

PC A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/538

PC C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC C07K14/75, C07K14/75, C07K16/24, C07K
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Canine and feline immunoregulatory
and method of using the same.
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                                                                                                                                                               Location/Qualifiers
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IgdgnlmIptpenknhqlcIkevfqgIdtlknqtahgeavdklfqnlslIkehIerqk
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/product="interleukin-5"
/protein_id="AAL10715.1"
/db_xref="GI:15919181"
                        /organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="taxon:9615"
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Sutheria; Carnivora; Fissipedia; Canidae;
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OS Canis
PN JP 200
PD 04-JUN
PF 28-MAY
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PC A61K45/
PC C07K14/
PC C07K14/
G01N33/15,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
1 (bases 1 to 610)
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                                                                                                                                                                                                                                                                                                                                                                 and feline immunoregulatory proteins,
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R 29-MAY-1998 US 60/087306

I GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING

C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,

C A61K39/395
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JP 2002516104-A/65
04-JUN-2002
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                                                                                                                                                                                                  /organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="taxon:9615"
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100.0%; Pred. No. 3.6e-74;
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Sin,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Cantent: US 6471957-A 80 29-OCT-2002;
Location/Qualifiers
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Sequence 80
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Sim,G.- Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses ther
Patent: US 6471957-A 82 29-CCT-2002;
Location/Qualifiers
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Sequence 82 from patent US 6471957.
AR241537
AR241537.1 GI:27287246
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                     TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAG 120
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                                                                                                                                                     /organism="unknown"
/mol_type="genomic
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                                                                                           10.3%; Score 170; DB 6; 1 100.0%; Pred. No. 3.6e-74; Live 0; Mismatches 0;
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AR254493/c
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Sequence
AR254493
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Caniney II-13 immunoregulatory proteins and uses thereof Patent: US 6482403-A 80 19-NOV-2002;
Location/Qualifiers
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Sequence
AR254492
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R. Caniney IL-13 immunoregulatory proteins and uses Patent: US 6482403-A 82 19-NOV-2002;
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TTGGGGCTGCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAG
                                                           AGGCAAACACTGAACATTTCAGAGCTATGAGATGCTTCTGAATTTGAGTTTTGCTAGCTC
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/mol_type="genomic
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/mol_type="genomic/
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Pred. No. 3.6e-74;
0; Mismatches 0;
                                                                                                        Score 170; DB 6; 1
Pred. No. 3.6e-74;
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US 6482403
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US 6482403
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Matches
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TITLE
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Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nuclei and method of using the same
Patent: JP 2002516104-A 66 04-JUN-2002;
HESKA CORP
OS Canis familiaris (dog)
PN JP 2002516104-A/66
PD 04-JUN-2002
PF 28-MAY-1999 JP 2000551002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PF 28-MAY-1999 JP 2000551002
PR 29-MAY-1999 US 60/087306
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395, PC A61K39/395, A61K48/00, A61P37/02, A61P37/04 COTK14/54, A61K34/54, A61P37/02, A61P37/04 COTK14/54, A61P37/04 COTK14/54, A61P37/04 COTK14/54, A61P37/04 COTK14/54
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      BD211561
Canine and
and method
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PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5, and feline immunoregulatory proteins, nucleic acid
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Mammalia; Eutheria; Carnivora; Fissipedia;
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                                                                                                                                                                                       GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT 120
                                                                                                                                                                                                          GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT 146
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
402 bp feline immunoregulatory of using the same.
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100.0%; Pr
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                      PAT 17-JUL-2003 acid molecules
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                                                    AUTHORS
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Sequence
AR241538
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PC A61K45/
PC C07K14/
PC C07K14/
G01N33/15,
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OS Canis
PN JP 200
PD 04-JUN
PF 28-MAY
PR 29-MAY
PI GEKKEE
                                                  1 (bases 1 to 402)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Canine IL-4 immunoregulatory proteins and uses the
Patent: US 6471957-A 83 29-OCT-2002;
                                                                                                                                                     Unknown
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Sim,G., Yang,S., Dr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
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Canis familiaris
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JP 2002516104-A/67
                                                                                                                     Unclassified
                                                                                                                                         Unknown
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R 29-MAY-1998 US 60/087306

GEKKEE SIN,SHUMIN YANG,MATTHEW J DREITZ,RAMANI S WONDERLING.
C12N15/09,A61K31/7088,A61K38/00,A61K38/21,A61K39/00,A61K39/395,

C A61K39/395,
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JP 2002516104-A/67
04-JUN-2002
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ilarity 100.0%;
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
                                  Location/Qualifiers
      /organism="unknown"
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0; Mismatches
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Length 402; Indels

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PAT 20-DEC-2002

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Sequence
AR241539
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Sim,G-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses ther
Patent: US 6471957-A 84 29-OCT-2002;
                                                                           Unknown
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                                                                 Unclassified.
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14; Conservative
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ilarity 100.0%;
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/mol_type="genomic |
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Sequence 84
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                                                                                              Sequence 1
AR300436
AR300436.1
Unclassified.

1 (bases 1 to 405)
Guo, H., Lawton, R., Mermer, B. and Aiyappa, A.
Methods and compositions concerning canine
Patent: US 6537781-A 1 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 402)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
Caniney II-13 immunoregulatory proteins and use
Patent: US 6482403-A 84 19-NOV-2002;
Location/Qualifiers
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/mol_type="genomic
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1h; Page 223-224; 264pp; English.

Sequences AAZ55546-Z55551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine feline Flt-3 ligand, canine or feline CD40, canine or feline CD54

(CD40

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immunoregulatory proteins fr preventing e.g. tumors or au		Wonderling RS;		·	•			Location/Qualifiers 29. 433 /*tag= a /product= "Canine IL-5"		<pre>canine; inhibitor; er; autoimmune disea</pre>	CDNA.			8P.	ALIGNMENTS	ADI43750	ABN98947	AAH92593 AAH92594	ABX56654	ACC73216 ADL09862	ADQ17817	AAL23698 ACN84861	ACN91925	ACC55526 AAI.14836	ABZ73094	ABD20522	ABZ96674 ABD20523	AAA34858 AAF20980	ABZ96672	AAA34856 AAF20978	R120
from cats or dogs, autoimmune disease.										immune response; se; vaccine; ss.						Add30659 Flant Yie Adi43750 Plant tra	Abn98947 Arabidops	Aah92593 Human inf Aah92594 Human inf	Abx56654 Arabidops	ACC73216 Cat flea Adl09862 Cat flea	Human	luman bi Breast	Breas	7 P.	Abz73094 Rice leaf	Ŧ	Abz96674 Human nuc Abd20523 Human pul	22	Human	95 7	56 Human

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins their associated nucleic acids, specific antibodies and inhibitors may be
                                   Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease
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immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
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inflammatory reaction; ds.
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100.0%; Pred. No.
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Novel canine interleukin 5 polynucleotide and polypeptides are used generating antibodies which are useful in treating allergies in dogs

in dogs

Example

1;

Fig

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48pp; English

The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one version of the IL-5 coding sequence shown in the specification

Best Loc Matches Query Match

144;

Conservative

0

Mismatches

2.5e-42; hes 0;

Indels

0

Length 252; Other;

27 _

Local

Similarity

8.7%;

Score 144; Pred. No.

Sequence 252

BP;

69

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54 C; 60 G;

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61 87

GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTCCTCTCCACTCAT 146 GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT

120

ATGAGAATGCTTCTGAATTTGAGTTTTGCTAGCTCTTTGGGGGCTGCCTATGTTTTCTGCCTTT ATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCTCTTTGGGGCTGCCTATGTTTCTGCCTTT

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CGAACTTGGCTGATAGGCGATGGG 170

CGAACTTGGCTGATAGGCGATGGG

144

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AAZ55548

standard; cDNA; 402

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                                                                                             Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD54 (CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cate, dogs, horses and humans). They
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sim G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Canis familiaris.
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may be used to treat autoimmune or infectious diseases including allergies, tumours, inflammation and graft rejection, and to incresponse from a co-administered antigen. The nucleotide sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1h;
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DB; AAY58219.
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for treating or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tumour; cancer; autoimmune disease; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     264pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunoregulatory proteins from cats or dogs, preventing e.g. tumors or autoimmune disease
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                                     and to increase the
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tumours,

inflammation and graft administered antigen. The

rejection, a he nucleotide

and to increase the

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RESULT 5
AAZ55549/c
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allergies, tunnal from
                            Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD40 ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          also be used for the recombinant production of a protein, while nucleotide fragments are useful as probes, as amplification primers and as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
                                                                                                                                                                                                                        Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease.
                                                                                                                                                                                                                                                                                                                Sim G,
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                                                                                                                                                                                              Claim 1h; Page 226; 264pp; English.
                                                                                                                                                                                                                                                                       P-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunoregulation;
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Pred. No. 2.3e-42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                  Wonderling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         canine; inhibitor;
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ccine; ss.
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                                                                                                                         The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                also be used for the recombinant production of a protein, while nucleotide fragments are useful as probes, as amplification primers and as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
                                                                                                                                                                                                           Novel canine interleukin 5 polynucleotide and polypeptides are used for generating antibodies which are useful in treating allergies in dogs.
                                                                                  Sequence 405 BP; 131 A; 77 C; 94 G; 103 T; 0 U; 0 Other;
                                                                                                                                                                               Claim 31; Page 46; 48pp; English.
                                                                                                                                                                                                                                                                                             Guo H,
                                                                                                                                                                                                                                                                                                                                                                           09-AUG-2000; 2000WO-US021651
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Canis sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dog; interleukin-5; IL-5; allergy; cancer; gene therapy;
inflammatory reaction; ds.
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                                                                                                            version of the IL-5 coding sequence shown in the specification
                                                                                                                                                                                                                                                                                                                                                    10-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200111049-A2
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DB; AAB72615.
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                                                                                                                                                                                                                                                                                             Lawton
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCCTTT
 ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGGCTGCCTATGTTTCTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAACTTGGCTGATAGGCGATGGG 259
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                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                    99US-00371615
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                                                                                                                                                                                                                                                                                             Mermer B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; **
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                                        8.7%; Score 144; DB 4;
100.0%; Pred. No. 2.3e-42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 144; DB 3; ...; Pred. No. 2.3e-42;
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                                                                                                                                                                                                                                                                                             Aiyappa AP;
                            Mismatches
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                                                      Length 405
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                            Indels
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                            Gaps
  86
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                                                                                              Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (IL-5). The invention relates to canine IL-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40 CC ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and CC uncleotides which encode these immunoregulatory proteins. The proteins, CC their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC response in animals (particularly cats, dogs, horses and humans). They callergies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can CC also be used for the recombinant production of a protein, while CC nucleotide fragments are useful as probes, as amplification primers and CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
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Query Match
Best Local :
                                                    Sequence 345 BP; 120 A; 68 C; 78 G; 79 T; 0 U; 0 Other;
                                                                                       targetting
                                                                                                                                                                                                                                                                                                                                                                                                                         Claim lh; Page 226-227; 264pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Canine mature interleukin-5 (IL-5) cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-MAR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ55550;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ5550 standard; cDNA; 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (HESK-) HESKA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunoregulation; tumour; cancer; autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000-072623/06.
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 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCCTTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGAACTTGGCTGATAGGCGATGGG 144
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IL-5; antibody; canine; inhibitor; immune response;
on; tumour; cancer; autoimmune disease; vaccine; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0087306P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US011942
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7.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
 Score 129; DB 3;
Pred. No. 6.3e-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wonderling
 6.3e-37;
                Length 345
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1276 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACTATGAAGAACCAAACTGCC

Matches 129;

Conservative

0

Mismatches

0

Indels

0

Gaps

0

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RESULT BAZ55551/c
ID AAZ5555
XX Interl
XX Interl
XX W09961
XX WPI / 28-MAY
XX Claim
XX Sim G,
XX WPI / 2
DR WOLlei
PT Useful
XX Claim

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                                                                                                                                                                                                                                                              Sequences AAZ55546-Z5551 represent cDNA sequences encoding canine CC interleukin-5 (II-5). The invention relates to canine II-4, canine or feline Flt-3 ligand, canine or feline CD40, canine or feline CD54 (CD40 ligand), canine II-5, canine II-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and cnucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune cresponse in animals (particularly cats, dogs, horses and humans). They can be used to treat autoimmane or infectious diseases including CC also be used for the recombinant production of a protein, while concleotide fragments are useful as probes, as amplification primers and concleotide fragments are useful as probes, as amplification primers and concleotide fragments are useful as probes, as amplification primers and concleotide fragments are useful as probes, as amplification primers and concleotide fragments are useful as probes, as amplification primers and concleotide fragments are useful as probes, as amplification primers and concleotide fragments are useful as probes, as amplification primers and concleotides in an application, while the antibodies may be used in detection, and in drug
                                   Best Local Similarity Matches 129; Conserv
                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sim G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Interleukin-5; IL-5; antibody; canine; inhibitor; immune response;
immunoregulation; tumour; cancer; autoimmune disease; vaccine; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Canine mature interleukin-5 (IL-5) cDNA complement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1h; Page 228; 264pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAY-1998;
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                                                                                                                                                                    Sequence 345 BP; 79 A; 78 C; 68 G; 120 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HESK-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HESKA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCCAAAAA 1404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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100.0%; Preu....
hive 0; Mismatches
                                                                                                           7.8%;
                            Score 129; DB 3; -
;; Pred. No. 6.3e-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wonderling
                                                                                                       Length 345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease
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1276 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC 1335

Indels

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Gaps

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RESULT 10
AAT50756
ID AAT50

AAT50756 standard; cDNA; 399

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Conservative

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                                                                                                                                        Matches
                                                                                                                                                               Query Match
                                                                                                                                                                                                                       The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is one
                                                                                                                                                                                                                                                                                             Novel canine interleukin 5 polynucleotide and polypeptides are used for generating antibodies which are useful in treating allergies in dogs.
                                                                                                                                                                                       Sequence 393 BP; 128
                                                                                                                                                                                                                                                                                                                                                         Guo H,
                                                                                                                                                                                                                                                                                                                                                                                                         10-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dog; interleukin-5; IL-5; allergy; cancer;
inflammatory reaction; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-MAY-2001
                                                                                                                                                                                                            version of the IL-5 coding sequence shown in the specification
                                                                                                                                                                                                                                                                        Claim 1; Page 35; 48pp; English.
                                                                                                                                                                                                                                                                                                                                 WPI; 2001-191542/19.
                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2000; 2000WO-US021651
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Canine interleukin-5 coding sequence #3.
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                                                                                                                                                                                                                                                                                                                                                                                 (IDEX-) IDEXX LAB INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-FEB-2001.
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                                                                                                                                                   Local
                      1396
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                                                                                                                 1276
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                                             136
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196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               105
                                                                                                                                         129;
                                                                                                                                                                                                                                                                                                                                                         Lawton R, Mermer
                                                                                                                                                    Similarity
                                                                                                         CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
                                                           CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG 1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard; DNA; 393 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG 1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCCAAAAA 1404
                                             CACGGGGAGGCTGTGGATAAACTATTCCAAAAACTTGTCTTTAATAAAAGAACACATAGAG 195
                                                                                          CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCCAAAAA 97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAAGAACACATAGAG 106
CCCCAAAAA 204
                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                         9908-00371615
                                                                                                                                                   100.0%;
                                                                                                                                                                                       A; 82 C; 86 G;
                                                                                                                                                                7.8%;
                                                                                                                                                                                                                                                                                                                                                         'n
                                                                                                                                                 Score 129; DB 4;
; Pred. No. 6.2e-37;
                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                         Aiyappa AP;
                                                                                                                                         Mismatches
                                                                                                                                                                                       97 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene therapy;
                                                                                                                                         0,
                                                                                                                                                              Length 393
                                                                                                                                         Indels
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                                                                                                                                                                                                                                             AAT50755
                                                                RESULT 11
                                                                                                                                                                                                                                                                     The sequences given in AAT50755-56 encode ovine interleukin-5 (IL-5). CC Ovine IL-5 or IL-12 are used to treat and/or prevent infections in CC livestock (esp. cows and sheep), particularly where the animals are cc adjuvante in vaccines for veterinary use (partic. weakly immunogenic subunit or synthetic peptide vaccines). They may also be used as CC adjuvante in vaccines for veterinary use (partic. weakly immunogenic subunit or synthetic peptide vaccines). They may also be used to treat cancer, immunosuppression and allargy, to enhance/suppress the CC infection. The interleukins are immunoassays for rapid diagnosis of infection. The interleukins are immunoassays for rapid diagnosis of CC promotes growth of early haematopoietic progenitor cells and generation CC of cytotoxic cells from thymocytes, also it stimulates production and CC induces production of gamma-interferon by, and proliferation of. T and NK CC cells and increases the (non-) specific cytolytic lymphocyte response. The CC genetic constructs can also be used for in vitro production of IL-5 or cc 12. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                             Query Match
Best Local S
Matches 43
AAT50755;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12; livestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer; immunosuppression; allergy; reproductive system; growth; early maturity; antibody; diagnosis; immunopotentiator; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
                                AAT50755 standard; DNA; 520 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 6; Page 41-42; 78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-JUN-1995;
27-OCT-1995;
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24-SEP-1997
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                                                                                                                                                                                                                                           Sequence 399
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95AU-00006244.
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Pred. No.
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The sequences given in AAT50755-56 encode ovine interleukin-5 (IL-5). CC Ovine IL-5 or IL-12 are used to treat and/or prevent infections in CC livestock (esp. cows and sheep), particularly where the animals are CC stressed, e.g. during transport. IL-5 and IL-12 can also be used as CC adjuvants in vaccines for veterinary use (partic. weakly immunogenic cancer, immunosuppression and allery, to enhance/suppress the CC reproductive system and to promote growth or early maturity. Optionally city interleukin can be delivered from constructs or delivery cells and CC infection. The interleukins are immunoassays for rapid disgnosis of CC infection. The interleukins are immunoassays for spid disgnosis of CC promotes growth of early haematopoietic progenitor cells and generation of cytotoxic cells from thymocytes, also it stimulates production and CC secretion of IgM and IgA (in synergism with bacterial endotoxin). IL-12 canduces production of gamma-interferon by, and proliferation of, T and NK CC cells and increases the (non-)specific cytolytic lymphocyte response. The CC genetic constructs can also be used for in vitro production of IL-5 or - CC (Updated on 17-OCT-2003 to standardise OS field)
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27-OCT-1995;
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24-SEP-1997
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Length 520,

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RESULT 13
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AC ABV56
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AAZ44265
ID AAZ44265
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Best Local
                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        consisting of three protective antigen genes (CC1, CC3 and CC4) of pig tenial cysticercus and coexpression unit of related cell factor gamma interferon (IFN-gamma) and pork interleukin 5 (IL-5)] genes. The production and purification process of said nucleic acid vaccine is simple and convenient, the physical and chemical properties of the vaccine are stable, and the vaccine is easy to store and transport, and possesses effective immunological protective function for human and pig cysticercosis. This sequence represents the pig IL-5 gene used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cysticercosis. This sequention method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    curing human and pork cysticercosis. The invention involves the formation of a eukaryotic expression plasmid from fusion transcript expression unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pig; vaccine; cysticercosis; protective antigen; cC1; cC3; cC4; tenial cysticercus; gamma interferon; IFN-gamma; interleukin 5; IL-5; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes a novel nucleic acid vaccine for preventing and curing human and pork cysticercosis. The invention involves the formation
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                            ABV56577
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 838 BP; 280 A; 148 C; 171 G; 239 T; 0 U; 0 Other;
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                                                                                 ABV56577 standard; cDNA;
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                                                                                                                                                                                                                                                                             ATTTGAGTTTGCTAGCTCTTGGGGCTGCCTATGTTTCTGCC 83
                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vaccine for cysticercosis co-contracted by human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cell carcinogenic potential of a patient; (h) assessing the prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-MAR-2000; 2000US-0189862P.
25-MAY-2000; 2000US-0207454P.
09-JUN-2000; 2000US-0211314P.
18-JUL-2000; 2000US-0219007P.
13-DEC-2000; 2000US-0255281P.
                                            single nucleotide polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer, stage of prostate cancer.
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                                                                                          Human inflammatory bowel disease related gene fragment IGR1292a.
                                                                                                                           09-OCT-2001
                                                                                                                                                          AAH92592;
                                                                                                                                                                                      AAH92592 standard;
                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 10911; 11750pp; English.
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                                                                                                                                                                                                                                                                     69
                                                                                                                                                                                                                                                                                                                              l Similarity
26; Conserv
                                                           inflammatory bowel disease; Crohn's disease; ulcerative colitis;
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                                                                                                                                                                                                                                                                                     TTTTTTTTTTTTTTTTACAAGAAT 1483
                                                                                                                                                                                                                                                                                                                                                                                             357 BP; 104 A; 93 C; 90 G;
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                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                           (first entry)
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marker; gene; ss.
                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                                                                                                                                               100.0%;
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Pred. No. 11
                                              SNP;
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                                              chromosome 19p13;
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Homo sapiens.

chromosome 5q31-33; forensic test; gene therapy; ds

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RESULT 15
AAC84351/c
ID AAC843
XX AAC843
XX AC843
XX 19-MAR
XX Corn c
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KW Acquir
KW Plant
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Best Local Similarity
Matches 26; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a method for detecting the presence of polymorphisms associated with inflammatory bowel diseases such as ulcerative colitis and Crohn's disease. The methods can be used to detect the presence of genetic polymorphisms associated with inflammatory bowel disease and correlating their occurrence with disease states. They may be used in this way for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis. The present sequence is a gene containing a polymorphic site described in the exemplification of the
 Bougri OV,
                                                                                                           23-NOV-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 261-262; 463pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Testing for the presence of polymorphisms associated with inflammatory bowel disease, using a hybridization assay.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-DEC-1999; 99US-0170257P.
10-APR-2000; 2000US-0196046P.
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                                                       13-MAY-1999;
                                                                                12-MAY-2000; 2000WO-US013307
                                                                                                                                    WO200070069-A1
                                                                                                                                                                                                                                        Acquired resistance gene; Nph1; Nph2; rice; Nph2-1; Nph2-2; wheat; plant pathogen; transgenic; disease resistance; corn; Npr1; ss.
                                                                                                                                                                                                                                                                                 Corn clone CPR951 FL cDNA sequence.
                                                                                                                                                                                                                                                                                                             19-MAR-2001
                                                                                                                                                                                                                                                                                                                                                               AAC84351 standard; DNA; 2235
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                             (MONS ) MONSANTO CO
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  Rommens CMT,
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ilarity 100.0%; Pi
Conservative 0;
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261..1491
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  Srivastava
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Mismatches
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resistance in plants (e.g. wheat or rice) to control plant pathogens e.g. the genes can be introduced to make transgenic plants with increased disease resistance. The polynucleotides are also useful to produce probes and primers useful to detect the polynucleotides (to identify transgenic plants containing an acquired resistance gene) and to isolate similar sequences e.g. from other species. The polypeptides can be used to make antibodies useful to monitor protein production e.g. in transgenic plants. The present sequence represents a corn clone CPR951 FL cDNA sequence, used in the identification of acquired resistance genes from
                                                                                                                                                                                                                                                                              The invention relates to acquired resistance genes Nph1 from rice, and Nph2-1 and Nph2-2 from wheat. The Nph1 and Nph2 polypeptides can be expressed by standard recombinant methodology. The Nph1 and Nph2 polynucleotides or polypeptides can be used to enhance acquired
                                                                                                                                                                                                                                                                                                                                                                                                                                             New acquired resistance genes Nph1 from rice, Oryza sativa, and Nph2-1 and Nph2-2 from wheat, Triticum aestivum, useful for producing transgenic plants with increased disease resistance.
Sequence 2235 BP; 630 A; 466 C; 566 G;
                                                rice and wheat
                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page
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DB; AAB48093.
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573 T; 0 U; 0 Other;
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Search completed: August Job time: 1114.38 secs 80 2005, 16:37:43

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2196 1458

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Similarity 26; Conserv

1.6%; ilarity 100.0%; Conservative (

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Score 26; DB Pred. No. 7.9

DB 7.5 .9; .<u>.</u> ٥,

Length 2235; Indels

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Gaps

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Result
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Perfect score:
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Gapop 60.0 , Gapext 60.0
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1658
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/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
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US-09-451-527-82
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14980, A
11688, A
12683, A
13194, A
RESULT 2
US-09-322-409-82/c
US-09-322-409-82/c
; Sequence 82, Application U
; Patent No. 6471957
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
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ALIGNMENTS

GENERAL INFORMATION: APPLICANT: Sim, Gek-Kee APPLICANT: Sim, Gek-Kee APPLICANT: Sim, Gek-Kee APPLICANT: Dreitz, Matthew J. APPLICANT: Dreitz, Matthew J. APPLICANT: Wonderling, Ramani S. TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION CANINE AND USES THEREOF FILE REFERENCE: IM-2-C1 CURRENT APPLICATION NUMBER: US/09/322,409 CURRENT APPLICATION NUMBER: 05/087,306 EARLIER APPLICATION NUMBER: 60/087,306 EARLIER FILING DATE: 1998-05-29 NUMBER OF SEQ ID NOS: 154 SOFTWARE: Patentin Ver. 2.0 ; NAME/KEY: CDS ; LOCATION: (29)..(430) US-09-322-409-80 US-09-322-409-80 Sequence 80, Appl. Patent No. 647195 Best Local Similarity Matches 170; Conserv Query Match Best Local : LENGTH: 610 TYPE: DNA ORGANISM: Canis familiaris FEATURE: 63 61 1 AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC w TTGGGGCTGCCTATGTTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAG AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC Application Conservative 100.0%; 10.3%; Score 170; DB 4; 100.0%; Pred. No. 1.2e-61; US/09322409 <u>.</u>. Mismatches 0 Length 610; Indels 0 Gaps GGCAG 120 60 122 62

US/09322409

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; TYPE: DNA
; ORGANISM: Canis familiaris
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (29)..(430)
US-09-451-527-80
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
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US-09-322-409-82
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Best Local Similarity
                                                                                                                            Matches 170;
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Best Local Similarity
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APPLICANT: Dreitz, Matthew J.
APPLICANT: Morderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REPERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
COCETMANDE: Defantin Var. 2.0
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100.0%; Prf
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                                                                                                                          Score 170; DB 4;
; Pred. No. 1.2e-61;
0; Mismatches 0;
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                                                                                                                                                               Length 610;
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
FEARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/32,409
EARLIER APPLICATION NUMBER: 09/32,409
EARLIER APPLICATION NUMBER: 09/32,409
EARLIER FILING DATE: 1999-05-28
EARLIER FILING DATE: 1998-05-29
UNMBER OF SEQ ID NOS: 174
SOFTMARE: PALENTIN Ver. 2.0
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US-09-451-527-82/c
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                                                             SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 83
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LENGTH: 610
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Patent No. 6482403
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                                                                                                                                                                                                          APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
EILE REFERENCE: IM-2-C1
                                                                                                      CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
TYPE: DNA
ORGANISM: Canis
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                                           ENGTH:
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  familiaris
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100.0%; Pred. No. 1.2e-61;
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US-09-322-409-84/c
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US-09-451-527-83
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TYPE: DNA
ORGANISM: Canis familiaris
US-09-322-409-84
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Best Local Similarity
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Best Local Similarity
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APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CALINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
               GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Ureitz, Matthew J.
APPLICANT: Monderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
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CURRENT APPLICATION NUMBER: US/09/451,527
                                                                                                                                                                                                                                                                                                147 CGAACTTGGCTGATAGGCGATGGG 170
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100.0%; Pred. No. 9.7e-51;
tive 0; Mismatches 0;
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; LENGTH: 402
; TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-83
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SEQ ID NO 83
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Best Local Similarity 100.0%;
Matches 144; Conservative
                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 84
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                                                                                                                                                                                                                                       Query Match
Best Local Similarity
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EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IN-2-C2
                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                           EARLIER FILING DATE: 1998-05-29 NUMBER OF SEQ ID NOS: 174
                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
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                                                                                               GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACACTGCTCTCCACTCAT 146
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                                   CGAACTTGGCTGATAGGCGATGGG 170
                                                                        GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCCCACTCAT
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100.0%; Pred. No. 9.7e-51;
rative 0; Mismatches 0;
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                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Canis familiaris
FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(345)
IS-09-322-409-85
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Patent No. 6537781
GENERAL INFORMATION:
APPLICANT: IDEXX LABORATORIES
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
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Best Local Similarity
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANIME AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION UNMER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
ROFTWARE: PAFENTIN Ver 2 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 405
TYPE: DNA
ORGANISM: Canis familiaris
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                                                                                                                                                                   Local
                                                                                                     1276 CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC 1335
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CACGGGGAGGCTGTGGATAJACTATTCCAAJACTTGTCTTTJAATAJAJAGAACACATAGAG 1395
                                                               CACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCC
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100.0%; Pro
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100.0%; Pred. No. 1.9e-44;
tive 0; Mismatches 0;
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PATENT APPLICATION NUMBER: 1999-12-01
CURRENT FILING DATE: 1999-12-01
EARLIER FILING DATE: 1998-05-28
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SEQ ID NO 85
SEQ ID NO 85
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TYPE: DNA
; ORGANISM: Canis familiaris
US-09-322-409-87
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Best Local Similarity 100.0%;
Marches 129; Conservative
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CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION UNMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 87
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Patent No. 6471957
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APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
TYPE: DNA ORGANISM: Canis familiaris
                                    LENGTH:
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US-09-569-804-20/c
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US-09-451-527-87/c
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US-09-451-527-85
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Best Local Similarity 100.0%; P.
Conservative 0;
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LENGTH: 345
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Best Local Similarity 100.0%;
                                                                     GENERAL INFORMATION:
                                                                                      Sequence 20, Application US/09569804 Patent No. 6506962
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                APPLICANT:
APPLICANT:
APPLICANT:
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EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
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6482403
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Bougri, Oleg
Rommens, Caius
Srivastava, Neelam
Swords, Kathleen M
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                                                                                                                                                                SOFTWARE: PatentIn Ver. 2.0
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Best Local Similarity
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LENGTH: 2235
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Patent No. 6136603
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                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 38-21 (15415 CURRENT APPLICATION NUMBER: CURRENT FILING DATE: 2000-C
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APPLICANT: McKay, Robert
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ALIGNMENTS

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APPLICANT: Yang, Shumin
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 18
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Patent No. US20020127200A1
GENERAL INFORMATION:
                                          NAME/KEY: intron
LOCATION: (171).
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RESULT 2
US-10-787-382-18
Sequence 18, Application US/10787382
Publication No. US20040191868A1
GENERAL INFORMATION:
APPLICANT: Wang, Shumin
APPLICANT: McCall, Catherine A.
CITTLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787, 382
CURRENT APPLICATION NUMBER: US/9/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 09322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 09322,409
PRIOR PRICING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SECTION 018
SECTION 018
LENGTH: 1658
TYPE: DNA
CRANISM: Canis familiaris
PEATURE:
NAME/KEY: introm
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NAME/KEY: intron

LOCATION: (407)..(1275)

FEATURE:

NAME/KEY: intron

LOCATION: (1405)..(1522)

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RESULT 3

US-09-755-633-19/c

Sequence 19, Application US/09755633

Patent No. US20020127200A1

GENERAL INFORMATION:

APPLICANT: McCall, Catherine A.

APPLICANT: McCall, Catherine A.

APPLICANT: Weber, Eric R.

TITLE OF INVENTION: CANINE AND FELINE IMMUN

TITLE OF INVENTION: ACID MOLECULES, AND USE

FILE REFERENCE: IM-2-C1-C1

CURRENT FILING DATE: 2001-01-05

PRIOR APPLICATION NUMBER: US/09/755,633

CURRENT FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21

SOFTWARE: PatentIn Ver. 2.1
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TITLE OF INVENTION: CANING AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1 CURRENT APPLICATION NUMBER: US/10/787,382 CURRENT FILING DATE: 2004-02-24 PRIOR APPLICATION NUMBER: US/09/755,633 PRIOR FILING DATE: 2001-01-05 PRIOR FILING DATE: 2001-01-05 PRIOR APPLICATION NUMBER: 09/322,409 PRIOR APPLICATION NUMBER: 09/322,409 PRIOR FILING DATE: 1999-05-28 PRIOR APPLICATION NUMBER: 60/087,306 PRIOR FILING DATE: 1998-05-29 NUMBER OF SEQ ID NOWS: 21 SOFTWARE: Patentin Ver. 2.1 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 19 LENGTH: 1658
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US-10-787-382-19/c
; Sequence 19, Application US/10787382
publication No. US20040191868A1
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APPLICANT: McCall, Catherine
APPLICANT: Weber, Eric R.
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US-10-787-382-19
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Best Local Similarity 99.8%;
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                            APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUN
TITLE OF INVENTION: ACID MOLECULES, AND USE
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION UNMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/87,306
PRIOR FILING DATE: 1998-05-29
INUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver. 2.1
SOFTWARE: PATENTIN Ver. 2.1
SOFTWARE: PATENTIN Ver. 2.1
SOFTWARE: PATENTIN Ver. 2.1
CORGANISM: Canis familiaris
US-09-755-633-21
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US-09-755-633-21
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   24.5%;
 Score 406;
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US-10-787-382-21
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TYPE: DNA
; ORGANISM: Canis familiaris
US-10-787-382-21
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Best Local Similarity
Matches 406; Conserv
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SEQ ID NO 21
LENGTH: 671
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                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/9/755,633
PRIOR APPLICATION NUMBER: US/9/755,633
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR PILING DATE: 1999-05-28
PRIOR PILING DATE: 1998-05-29
PRIOR PILING DATE: 1998-05-29
NUMBER: OF SEQ ID NOS: 21
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APPLICANT: WcCall, Catherine A.
APPLICANT: Weber, Eric R.
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 AGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCT
                                                                                                                                AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC 60
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                                                                    TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAG
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                                                 TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAG
                                                                                                                                                                  24.5%; Score 406; DB 19; 1 ilarity 100.0%; Pred. No. 1.6e-184; Conservative 0; Mismatches 0;
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; Mismatches 0;
                                                                                                                                                                                                Length 671;
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; Sequence 6, Application US/09755633; Patent No. US20020127200A1; GENERAL INFORMATION: GENERAL INFORMATION: Yang, Shumin; APPLICANT: WcCall, Catherine A.; APPLICANT: Weber, Eric R.; APPLICANT: Weber, Eric R.
                                                                                                         RESULT 8
US-09-755-633-6/c
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US-09-755-633-4
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APPLICANT: MCCall, Catherine A.

APPLICANT: Weber, Eric R.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY:

TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C1-C1

CURRENT APPLICATION NUMBER: US/09/755,633

CURRENT FILING DATE: 2001-01-05

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/687,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21

SOSTWARE: Patentin Ver. 2.1

SOSTWARE: Patentin Ver. 2.1
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                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY: CDS
LOCATION: (29)..(430)
                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
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                                                                                       TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAG
                                                                                                                                                                         AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC
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                                                                                                                              AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC
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                                                                                                                                                                                                                                            100.0%;
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                                                                                                                                                                                                                                          Score 170; DB 9; Pred. No. 6.9e-71;
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                                                                                                                                                                                                                                                            Length 610
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CANINE AND FELINE IMMUNOREGULATORY PROTEINS,

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SQ ID NO 6
LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
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SEQ ID NO 80
LENGTH: 610
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Publication No.
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Best Local Similarity
                                                                                                                                                                              Matches
                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1 MOLECULES, AND USES THEREOF
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-06-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
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CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR PPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                  NAME/KEY: CDS
LOCATION: (29)..(430)
10-218-654-80
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/087,306 PRIOR FILING DATE: 1998-05-29
                                                                                                                                                                                                                                                                                                                                   ORGANISM: Canis familiaris FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                         / Match 10.3%; So Local Similarity 100.0%; P nes 170; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          548
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                         TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAG 120
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                                                                                   AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC
                                                                                                                                  AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC 60
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TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAG 122
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                                                                                                                                                                                            Score 170; DB 14; Length 610; Pred. No. 6.9e-71;
                                                                                                                                                                              Mismatches
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver: 2.0
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US-10-262-439-80
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US-10-218-654-82/c
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                                                                  FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PatentIn Ver. 2
SEQ ID NO 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 80, Application US/10262439 Publication No. US20030143196A1
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Publication No. US20030099609A1
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; TYPE: DNA; COND familiaris; CRGANISM: Canis familiaris; FEATURE: CDS; NAME/KEY: CDS; LOCATION: (29)..(430)
US-10-262-439-80
                                    RESULT 13
US-10-787-382-4
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US-10-262-439-82/c
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TYPE: DNA
; ORGANISM: Canis familiaris
US-10-262-439-82
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CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PATENTIN Ver. 2.0
Sequence 4, Application US/10787382
Publication No. US20040191868A1
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Best Local
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
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CURRENT APPLICATION UNMER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
FRIOR APPLICATION UNMER: US/99/755,633
FRIOR FILING DATE: 2001-01-05
PRIOR APPLICATION UNMER: U9/9322,409
FRIOR APPLICATION UNMER: 09/322,409
FRIOR FILING DATE: 1999-05-28
FRIOR FILING DATE: 1998-05-29
FRIOR FILING DATE: 1998-05-29
INUMER: 60/087,306
FRIOR FILING DATE: 1998-05-29
INUMER: OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 6
LENGTH: 610
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APPLICANT: WcCall, Catherine A.
APPLICANT: WcBer, Eric R.
APPLICANT: WcBer, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/9/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1998-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
COMPANDE: DEFETT NOS: 21
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; LOCATION: (29)..(430)
US-10-787-382-4
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Query Match
Best Local Similarity
Matches 170; Conserv
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
                                                                                                                  TYPE: DNA ORGANISM: Canis familiaris
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10.3%; Score 170; DB 19; ilarity 100.0%; Pred. No. 6.9e-71; Conservative 0; Mismatches 0;
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; Pred. No. 6.9e-71;
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                                                DB 19; Length 610;
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APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
FIITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 7
LENGTH: 402
TYPE: DUAA
ORGANISM: Canis familiaris
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US-09-755-633-7
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Search completed: August 8, 2005, 14:25:05 Job time: 1365.34 secs
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Patent No. US20020127200A1
GENERAL INFORMATION:
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                                                            CE331159
BX467653
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BE897924
AL370520
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CA429152
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CA429123 UI-H-FH1-CV22596 WS0162-B-277
CR564475 CR564475
CD038829 UIPPF012
AL27861B Tetraodon
CR710390 Tetraodon
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1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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AW124901	CN782511	CD424543	BI301007	AI274359	CV501477	BU759812	BI299610	BU700148	BE474681	BI708412	CO371439	CO375395	AL836604	AL836569	BG157100	BQ156344	BG651868	CK701268	AA475329	AW524394
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ALIGNMENTS

Qy 12 Db	Query Match Best Local : Matches 38	ORIGIN	FEATURES	PUBMED COMMENT .	TITLE JOURNAL	SOURCE ORGANISM REFERENCE AUTHORS	RESULT 1 CE331159 LOCUS DEFINITION ACCESSION VERSION VERSION VERSION
1270 ATTTAGCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAA 1329 	Query Match 23.5%; Score 389; DB 9; Length 622; Best Local Similarity 100.0%; Pred. No. 2.7e-176; Matches 389; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	/organism="Canis familiaris" /mol type="genomic DNA" /strain="standard Poodle" /db xref="taxon:9615" /clone lib="Dog Library" /note="Site 1: BstXI; Libraries were prepared from peripheral blood"	Tel: 301-838-0200 Fax: 301-838-0208 Email: ekirknes@tigr.org Class: shotgun. Location/Qualifiers	14512627 14512627 COntact: Kirkness EF The Institute for Genomic Research Department of Eukaryotic Genomics, TIGR, 9712 Medical Center Drive,	Rusch,D.B., Delcher,A.L., Pop,M., Wang,W., Fraser,C.M. and Venter,J.C. The dog genome: survey sequencing and comparative analysis Science 301 (5641), 1898-1903 (2003)	Canis familiaris (dog) Canis familiaris Canis familiaris Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Butheria; Carnivora; Fissipedia; Canidae; Canis. 1 (bases 1 to 622) Kirkness, E.F., Baina, V., Halpern, A.L., Levy, S., Remington, K.,	CE331159 622 bp DNA linear GSS 26-SEP-2003 tigr-gss-dog-17000333986568 Dog Library Canis familiaris genomic, genomic survey sequence. CE331159 CE331159.1 GI:36147469

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RESULT 2
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   1456 TGTTTTTTTTTTTTTTTTTACAAGAATT 1484
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                                                                                                                                                                                                                                                                                                                                                                                           Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 3' sequence of the clone insert
Clone from S. Wiemann, Molecular Genalysis, German Cancer
Research Center (DKFZ); Email s.wiemann@dkfz-heidelberg.de;
sequenced by GBF (National Research Centre for Biotechnology Ltd.,
Braunschweig/Germany) within the cDNA sequencing consortium of the
                                      29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BX493336 528 bp mRNA linear DKFZp7811243 s1 781 (synonym: hlcc4) Homo sapiens DKFZp7811243 3', mRNA sequence.

BX493336
                                                                                                                                                                                                                                                                                           r1 sequence also available.
This clone (DKFZp7811243) is available at tiplease contact the RZPD: Ressourcenzentrum,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bloecker, H., Boecher, M., Mewes, H.W., Weil, B., Fobo, G., Han, M. and Wiemann, S.
                                                                                                                                                                                                                                                                                                                                                                                German Genome Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST (Bloecker,H., Boecher,M., Mewes,H.W., Weil,B., Amid,C., et al.)
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia; Eutheria;
1 (bases 1 to 528)
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                                                     Similarity
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                                 1.7%; Scollarity 100.0%; Pi
Conservative 0;
                                                                                                                    /mol_type="mRNA"
/db xref="taxon:9606"
/db xref="taxon:9606"
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/dev stage="adult"
/lab_host="DH10B"
/clone_lib="781 (synonym: hlcc4)"
/note="Vector: pSportl_Sfi; Site_1: SfiIA; Site_cDNA-collection"
                                                                                                                                                                                                                                                             organism="Homo sapiens"
                                 Score 29; DB
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0; Mismatches
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Fotis C. Kafatos laboratory
European Molecular Biology Laboratory
Meyerhofstrasse 1, 69117 Heidelberg, Gen
Tel: +49 6221 387-440
Fax: +49 6221 387-206
Email: christop@embl-heidelberg.de
Contact: Christop@embl-heidelberg.de
Contact: 1, 6917 Heidelberg, German
Meyerhofstr. 1, 6917 Heidelberg, German
Tel: +49 6221 387-440
Fax: +49 6221 387-306
                                                                                                                                                                                                                                                                       552 TGCCTGTTTTTTTTTTTTTTTTTACAA 525
CB076419 684 bp mRNA linear EST 24-JAN-2003 hf42h04.gl Hedyotis terminalis flower - Stage 2 (NYBG) Hedyotis terminalis cDNA clone hf42h04, mRNA sequence.
CB076419 GI:27889856 EST.
EST.
Hedyotis terminalis
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Plate: P126 row: D column: 10.
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Unpublished (2002)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Westor: pT7T3D-Pac (Pharmacia); Site 1: NotI;
Site 2: EcoRI, ESTs sequenced from the T7 priming site
that reads from the 5' end of cDNA. The NAP1 is a
directionally cloned and normalized, oligo-T primed cDNA
library constructed from a mixture of Anopheles gambiae
developmental stages according to: Bonaldo, Lennon &
Soares (1996): Normalization and Subtraction: Two
Approaches To Facilitate Gene Discovery, Genome Research
6, 791-806."
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/lab_host="E. coli DH10B"
/clone_lib="NAP1"
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VA clone NAP1-P126-D-10-5, mRNA
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Levesque, M.P., Twigg, R.W., Motley, T., Katari, M.S., Dedhia, N.N.,
O'Shaughnessy, A.L., Balija, V., Martienssen, R.A., McCombie, R.W.,
Benfey, P. and Stevenson, D.
Benfey, P. and Stevenson, D.
Expressed tag sequences from Hedyotis terminalis flower - Stage 2
                                                               Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
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Tel: 516 367 8884
Fax: 516 367 8874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lita Annenberg Hazen Genome Sequencing Center Cold Spring Harbor Laboratory PO Box 100, Cold Spring Harbor, NY 11724, USA
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found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLAM9764 row: b column: 04
                                                                                                                                                                                                                          1 (bases 1 to 915)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
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                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/clone_lib="Hedyotis terminalis flower - Stage 2 (NYBG)"
/note="Torgan: flower; Vector: pBK-CMV; Site 1: XhoI;
Site 2: Eco RI; Date: Completed 12/18/01. Submitted to CSHI_12/1/01 Library: Stratagene ZAP Express CDNA
Synthesis Kit. The library was size-fractionated to enrich for large inserts. Sample: collected on the island of
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/db_xref="taxon:219667"
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Medicago truncatula
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Spermatophyta; Magnoliophyta; edaceae; Papilionoideae; Trifolieae;
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l Similarity 100.0%;
28; Conservative (
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Contact: Pascal Gamas and Etienne-Pascal Journet, Laboratoire de
Biologie Moleculaire des Relations Plantes-Microorganismes,
CNRS-INRA, BP 27 31326 Castanet-Tolosan Cedex, France (Email:
Mt-est@toulouse.inra.fr Website;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Medicago truncatula ESTs from nitrogen-starved roots Unpublished (2000)
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2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
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Location/Qualifiers
/tissue_type="root tips"
/dev_stage="harvested after 3 days of N-starvation"
/dev_stage="harvested after 3 days of N-starvation"
/clone_lib="MtBA"
/clone_lib="MtBA"
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/note="Vector: pBluescript pBK; Site_1: EcoRI; Site_2:
/note="Vector: pBluescript pBLuescript pBK; Site_1: EcoRI; Site_2: CDNA
/note="Vector: pBluescript pBLuescrip
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue type="melanotic melanoma"
/lab_host="DH10B (phage-resistant)"
/clone lib="NIH MGC 72"
/note="Organ: skin; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT
Average insert size 2 kb. Library constructed by Life
Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/cultivar="Jemalong"
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/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               db_xref="taxon:3880"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Medicago truncatula"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    clone="MtBA38C10"
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Pred. No.
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JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: est@watson.wustl.edu
When it has been determined, an EST from the other end of this
clone is listed in the 'Other ESTs on clone' field. This clone is
available through: Biogenetic Services, 801 32nd Ave. Brookings, SD
57006 USA (phone: 800 423 4163; email: info@biogeneticservices com)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycine max (soybean)
Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AW102086 534 bp mRNA linear EST 08-JUL-20 sd82h01.yl Gm-c1009 Glycine max cDNA clone GENOME SYSTEMS CLONE II Gm-c1009-938 5' similar to WP:D1007.7 CE09042 RNA-BINDING PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Shoemaker R/Public Soybean EST Project Public Soybean EST Project Washington University School of Medicine 4444 Porest Park Parkway, Box 8501, St. Louis, MO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shoemaker, R., Keim, P., Vodkin, L., Erpelding, J., Coryell, V., Khanna, A., Bolla, B., Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, B., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
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Location/Qualifiers
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/notes Tvector: pBluescript II XR; Site 1: BcoRI; Site 2: /notes Tvector: pBluescript II XR; Site 1: BcoRI; Site 2: /notes Tvector: pBluescript II XR; Site 1: BcoRI; Site 2: /notes of 2-month-old 'Williams' plants that were greenhouse grown in 5-gallon pots. To suppress nodulation, Black Gold All-Purpose potting soil was supplemented with: 0.36g/L available phosphoric acid (P205), 20mg/L urea N, 0.16g/L S, 0.49mg/L B, 2.5mg/L Cu, 0.15g/L Fe, 13.53mg/L Mm, 0.26mg/L Mo, 14mg/L Zn, 20mg/L Ca, and the following nutrients in a slow-release form (Osmocote): 0.165g/L ammonia N, 0.185g/L nitrate N, 0.35g/L available phosphoric acid, and 0.35g/L soluble potash. No nodules were visible on the roots at harvest. Stratagene's cDNA Synthesis Kit (catalog #200401) was used to synthesize the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequencing
Sequencage
                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:3847"
/clone="GENOME SYSTEMS CLONE ID: Gm-c1009-938"
/lab_host="XL10-Gold"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Glycine max"
/mol_type="mRNA"
/cultivar="Williams"
                                                                                                                                                                                                                                                                                                                                                                                           clone_lib="Gm-c1009"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27;
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mays cDNA, mRNA sequence.
BU571592
BU571592.1 GI:22935317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Department of Biological Sciences
Stanford University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1999)
Contact: Walbot V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Walbot,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: walbot@stanford.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Maize ESTs from various cDNA libraries sequenced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zea mays
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between 1mm and 3mm. Sharon Stanfield prepared the library in HybriZAP. Sample insert size range was 3 to 3 Kb with a 1 Kb average."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDNA. First-strand synthesis was performed with 5-methyl dCTP, hence the ligated CDNA is hemimethylated. Stratagene's first-strand synthesis primer was used [GAGAGAGAGAGAGAGAGAGACTAGTCTCGAG(T)-18]. After
                                                                                                      /note="Organ: tassels; Vector: HybriZAP; Site_1: EcoRI; Site_2: XhoI; George Chuck dissected immature tassels
                                                                                                                                                                                                                                                                                                        /tissue_type="tassels"
/dev_stage="just after the transition
inflorescence development"
                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/cultivar="OH43"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Zea mays"
                                                                                                                                                                                                                                                                            lab
                                                                                                                                                                                                                                                                                                                                                                                                                       db_xref="taxon:4577"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . 559
                                                                                                                                                                                                                                                                            host="XLOLR"
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                                                                                                                                                                                                                                 lib="946 - tassel primordium
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Pred. No. 0.21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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red by Schmidt lab
                                                                                                                                                                                                                                 prepared by
                                                                                                                                                                                                                                                                                                                                                   from vegetative to
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VERSION KEYWORDS

SOURCE

ACCESSION

ORIGIN

FEATURES

COMMENT

JOURNAL

RESULT 8 BU571592

FOCUS

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ORIGIN

1.6%;

Score 27; Pred. No.

DB 5; 0.21;

Length 559;

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REFERENCE
AUTHORS
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CA429123
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Best Local Similarity
Matches 27; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CA429123

OI-H-FH1-bfh-i-16-0-UI.s1 NCI CGAP_FH1 Homo sapiens cDNA clone
UI-H-FH1-bfh-i-16-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              from Dr. M. Bento Soares, bento-soares@uiowa.edu
The following repetitive elements were found in this
sequence: 1-45, -AT rich#Low_complexity 46-166, -ALU
compliment) 500-599, -ALU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: James Martin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumor Gene Index 
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CA429123.1 GI:24791849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CA429123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap
National Cancer Institute, Cancer Genome Ana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           compliment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA Library preparation: Dr. M. Bento Soares, University of Iowa CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa DNA Sequencing by: Dr. M. Bento Soares, University of Iowa Clone Distribution: Clone distribution information can be obtained
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 614)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer: M13 FORWARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                             /clone lib="NCI CGAP FHI"
/note="Organ: Chondrosarcoma; Vector: pT7T3-Pac
(pharmacia) with a modified polylinker; Site 1: EcoR I;
Site 2: Not I; NCI CGAP FHI is a normalized CDNA library
obtained from a cell line derived from grade I
chondrosarcoma tissue. The library was constructed and
normalized according to Bonaldo, Lennon and Soares, Genome
Research, 6:791-806, 1996. First strand cDNA synthesis was
primed with an oligo-dT primer containing a Not I site.
Double stranded cDNA was ligated to an EcoR I adaptor,
digested with Not I, and cloned directionally into
pT7T3-Pac vector. The oligonucleotide used to prime the
synthesis of first-strand cDNA contains a library tag
sequence that is located between the Not I site and the
(dT)18 tail. The sequence tag for this library is
AGAATCCGGC. The cell line was provided by Dr. James Martin
from the University of Iowa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                             TAG_TISSUE=Human Chondrosarcoma Cell Line CS8 - Grade 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="UI-H-FH1-b6hi-16-0-UI"
/tissue_type="Cell Line"
/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lab_host="DH10B (Life Technologies)"
                                                                          SEQ=AGAATCCGGC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _xref="taxon:9606"
  1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
  Score 27;
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  B
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Length 614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               found in this cDNA
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Query Match

6

ORIGIN

Query Match
Best Local Similarity
Matches 27; Conserv

Conservative (

1.6%; Score 27; DB 7; 100.0%; Pred. No. 0.21; ive 0; Mismatches

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Gaps

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Length 659; Indels

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REFERENCE
AUTHORS
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CV225996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 659)
Ralph,S., Cooper,D., Kolosova,N., Oddy,C., Butterfield,Y., Kirkpatrick,R., Liu,J., Palmquist,D., Stott,J., Barber,S., Yang,G., Kirkpatrick,R., Erown-John,M., Chand,S., Featherstone,R., Masson,A., Babakaiff,R., Brown-John,M., Chand,S., Featherstone,R., Masson,A., Mayo,M., Moran,J., Olson,T., Wong,D., Ritland,C.E., Siddiqui,A., Holt,R., Jones,S., Marra,M., Ellis,B.E., Douglas,C., Ritland,K. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Populus balsamifera subsp. trichocarpa (Populus trichocarpa)
Populus balsamifera subsp. trichocarpa
Populus balsamifera subsp. trichocarpa
Populus balsamifera subsp. trichocarpa
Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids I; Malpighiales; Salicaceae; Saliceae; Populus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CV225996 659 bp mRNA linear EST 21-SEP-
WS0162.B21_P19 PT-DX-A-7 Populus balsamifera subsp. trichocarpa
CDNA Clone WS0162_P19 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fax: 1-604-822-6097
Email: bohlmann@interchange.ubc.ca
Plate: WS0162 row: P column: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genome BC forest genomics program University of British Columbia UBC Biotechnology Laboratory, 6174 Ur Vancouver, British Columbia, Canada, Tel: 1-604-822-0282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The poplar transcriptome: Analysis of expressed sequence tags from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CV225996.1 GI:52374925
EST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bohlmann,J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Joerg Bohlmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       quality sequence stop: 659
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                                               /clone lib="PT-DX-A-7"
/clone lib="PT-DX-A-7"
/note="Vector: pBluescript II SK (+) XR; Site 1: ECORI (5'
end of cDNA); Site 2: XhoI (3' end of cDNA); Outer xylem
from 5 year old trees harvested every two weeks between
April and October of 2002 at the University of British
Columbia south campus farm in Vancouver, British Columbia
mRNA was isolated from each tissue source independently
and equal quantities of mRNA from each tissue were then
pooled. cDNA was prepared from 5 micrograms of mRNA and
directionally ligated into the pBluescript II SK (+) XR
vector using the pBluescript II XR CDNA Library
Construction Kit according to manufacturer's instructions
with modifications (Stratagene). Plasmid DNA was then
                            transformed by electroporation into DH10B cells
   (Invitrogen)
                                                                                                                                                                                                                                                                                                                                                                                                                                                'sex="Not determined"
'lab_host="E. coli DH10B T1 phage resistant cells"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="mRNA"
/cultivar="VT-125"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Populus balsamifera subsp. trichocarpa"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clone="WS0162 P19"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  db_xref="taxon:3694"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sub_species="trichocarpa"
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for propagation."
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Canada, V6T 1Z3
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CB824053
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unite de genetique et amelloration des fruits et legumes Institut National de la Recherche Agronomique Domaine Saint-Maurice BP 94 84143 Montfavet cedex Tel: 00-33-(0)4-32-72-26-68 Fax: 00-33-(0)4-32-72-26-62
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EST 5277 Ripe Apricot Fruit Lambda Zag
CDNA Clone bh002p09 3', mRNA sequence
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Contact: Audergon JM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grimplet, J., Romieu, C., Audergon, J.M., Albagnac, G., Lambert, P., Bouchet, J.P. and Terrier, N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Spermatophyta; Magnoliophyta; eudicoty rosids; eurosids I; Rosales; Rosaceae; 1 (bases 1 to 687)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core e
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus; Silurana.
                                                                                                                                                                                 CR564875 XGC-tailbud-head Xenopus tropicalis cDNA clone THdA009c20
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                                                      Xenopus tropicalis (western clawed frog)
Xenopus tropicalis
                                                                                                                                           3', mRNA sequence.
CR564875
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larity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               audergon@avignon.inra.fr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /dev_stage="Ripe stage"
/dev_stage="Ripe Apricot Fruit Lambda Zap II Library"
/clone_lib="Ripe Apricot Fruit Vector: Lambda Zap II, Site 1: Eco
/note="Organ: Fruit; Vector: Lambda Zap II, Site 1: Eco
RI; Site_2: XhoI; Oriented library, construction_described
in Molecular cloning and expression of a cDNA encoding
1-aminocyclopropane-1-carboxylate (ACC) oxidase from
apricot fruit (Prunus armeniaca cv. Bergeron) by
Mbeguia-Mbeguia D, Chahine H, Gomez RM, Gouble B, Audergon
JM, Souty M, Abbagnac G, Fils-Lycaon B in Physiol Plant
105:294-303 1999"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Prunus armeniaca"
/mol_type="mRNA"
/cultivar="Bergeron"
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/clone="bh002p09"
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Pred. No.
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0.21;
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Zap II Library Prunus armeniaca
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core eudicots;
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REFERENCE
AUTHORS
TITLE
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CD038829
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Arachis hypogaea

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids [ _____; Fabales; Fabaceae; Papilionoideae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: trop@sanger.ac.uk
Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE_ID: THdA009c20.q1kT7
This sequence is from a Xenopus Gene Collection (XGC) library constructed by Nigel Garrett.
Seq primer: T7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27;
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Contact: Croning MDR
Sanger Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 697)
Croning, M.D.R., Ashurst, J.L.,
Sanger Xenopus tropicalis EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CD038829 720 bp mRNA linear EST 07-MAY-2
UTPPI012 G08 USDA-Tifton Peanut Immature Pod cDNA Library (UTPP)
Arachis Typogaea cDNA clone UTPPI012_G08 5', mRNA sequence.
                                                                                                                                                                                                                                                       Molecular Genetics
USDA/ARS, Crop Protection and Management Research Unit
2747 Davis Rd., Tifton, GA 31794, USA
                                                                                                                                                                                                                                                                                                                                    Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                        Generation and Analyses of ESTs for Arachis hypogaea
                                                                                                                                                                                                                                                                                                                                                                              and Lynch, R.E.
                                                                                                                                                                                                                                                                                                                                                                                        Luo, M., Dang, P., Guo, B.Z.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Arachis hypogaea (peanut)
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CD038829.1 GI:30420667
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                                                                                                                                                                                                                                                                                                                  Contact: Baozhu Guo
                                                                                                                                                                                                                                                                                                                                                                                                                                Aeschynomeneae; Arachis.
                                                                                                                                                                                               Email: bguo@tifton.usda.gov
                                                                                                                                                                                                                 Fax: 229-387-232
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                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 720)
                                                                                                                                                                             primer: T3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="XGC-tailbud-head"
/note="Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA
/note="Vector: pCS107; Site_1: EcoRI, Site_2: NotI; cDNA
was oligo dT primed from Sug of poly A+ RNA from tailbud
head. EcoRI-NotI cut cDNA was then ligated into pCS107
with EcoRI at the 5' end and NotI at the 3' end."
/db xref="taxon:3818"
/clone="UTPPI012_G08"
/tissue_type="Immature pods"
/dev_stage="R6"
                                                                                                    /organism="Arachis hypogaea"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /dev_stage="tailbud head (stage 28-30)"
/lab_host="Escherichia coli DH10B."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/db_xref="taxon:8364"
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                                                                                /mol_type="mRNA"
/cultivar="A13"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone="THdA009c20"
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Taylor,R., Garrett,N. and Rogers,J. project 2001 (2004)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GSS; genome survey sequence.
Tetraodon nigroviridis
Tetraodon nigroviridis
Tetraodon nigroviridis
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodon.
Genoscope.

Direct Submission

Submitted (12-APR-2000) Genoscope - Centre National de Sequencage :

Submitted (12-APR-2000) Genoscope - Centre National de Sequencage :

BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr

- Web : www.genoscope.cns.fr)

This sequence is a single read and was generated as part of a large
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Estimate of human gene number provided by using Tetraodon nigroviridis DNA sequence Nat. Genet. 25 (2), 235-238 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roest Crollius, H., Jaillon, O., Dasilva, C., Bouneau, L., Fisher, C., Bernot, A., Fizames, C., Wincker, P., Brottier, P., Quetier, F., Saurin, W. and Weissenbach, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence.
AL278618
                                                                                                                                                                                                                                                                                                                        Roest Crollius, H., Jaillon, O., Dasilva, C., Ozouf-Costaz, C., Fizames, C., Fischer, C., Bouneau, L., Billault, A., Quetier, F., Saurin, W., Bernot, A. and Weissenbach, J. Characterization and repeat analysis of the compact genome of reshwater pufferfish Tetraodon nigroviridis Genome Res. 10 (7), 939-949 (2000)
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                                                                                                                                                                                                                            (bases 1 to 818)
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/clone_lib="USDA-Tifton Peanut Immature Pod cDNA Library
(UTPP)"
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Tetraodon nigroviridis full-length cDNA.
CR718261
CR718261.1 GI:51216512
HTC; cDNA; full-length; Tetraodon nigroviridis.
Tetraodon nigroviridis
Tetraodon nigroviridis
Tetraodon nigroviridis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodon.
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                                                                                                                                                                                                                                                                                      Genoscope.

Direct Submission

Direct Submission

Submitted (10-AUG-2004) Genoscope - Centre National de Sequencage

2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE

(B-mail : seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr)
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27; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genome. For more information, please thttp://www.genoscope.cns.fr/Tetraodon.Location/Qualifiers
                                                                                                                                                                                                                              http://www.genoscope.cns.fr/tetraodon.
Location/Qualifiers
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/note="Genoscope sequence
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/mol_type="genomic DNA"
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Sequence 30531, A Sequence 37150, A	Sequence 22, Appl Sequence 1, Appli	Sequence 31, Appl Sequence 22, Appl	Sequence 47, Appl Sequence 33, Appl	-	Sequence 29, Appl		-	•	Sequence 59, Appl	Sequence 35, Appl	Sequence 45, Appl	Sequence 1, Appli	Sequence 39, Appl

ALIGNMENTS

RESULT 1 US-09-280-799-78

US/09280799

GENERAL INFORMATION: Sequence 78, Application Patent No. 6136603

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CURRENT APPLICATION NUMBER: US/09/280,799; CURRENT FILING DATE: 1999-03-26; NUMBER OF SEQ ID NOS: 208; SOFTWARE: PatentIn Ver. 2.0; SEQ ID NO 78; SEQ ID NO 78; LENGTH: 3230; TYPE: DNA; ORGANISM: Homo sapiens
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
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             <u>AAATTATGATTCAGTAAAATGATGGCATGAATAAGTAAATTTCCTGTTTTAAGCTGTAAA</u>
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Best Local Similarity
Matches 1212; Conserv
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AAATTATGATTTGATAAAATGATTACATGAATCAG----TTTCATATATTTTAAGCTATAAA
                                                                      TTGTTTCCTTTCTTTTCAGAACCTGATGATTCCTACTCCTGAAAATAAAAATGTAAGTT
                                                                                                                             ACATCACCAGCAAACATTCTGTTAAAAAGTTATGAATGCTGGTGTGCTGTAAAAAATGATTG
                                                                                                                                                           ATATAGAGATCTGTTATAAATAATAAGATTCTGAG-CACATTAGTACATGGGTGATAACT
                                                                                                                                                                                                                          TTATGATTCCTACAGTCTGTAAAGTGCATAGGTAATCATTTGTGATGGTTCCTTTACTAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGTATTATATCCTCGTAAGCATTTATTTTTCATTAATCATTTACATTTATATCATTTGTA 1068
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                                           <u>AATAAAGAAATACATTGACGGCCAAAAAGTAAGTTACACACATTCAATGGAAGCTATATT</u>
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5324640-1
;PATCHT NO. 5324640
;PATCHT NO. 5324640
; PAPPLICANT: HONJO, TASUKU;TAKATBU, KİYOSHİ;SEVEKİNSON, EVA
TITLE OF INVENTION: HUMAN B-CELL DIFFERENTIATION FACTOR A'
;PROCESS OF PRODUCING SAID FACTOR
;NUMBER OF SEQUENCES: 2
CURRENT APPLICATION DATA:
;APPLICATION NUMBER: US/07/99,467
;FILING DATE: 21-SEP-1987
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    GAATGTCTGTACTTATAAATATGAGGAATGACTTT--
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                                                                                                             GTATCAGTTAACATTGGGATGATTTAATTTTATCTATTTTGTTTTTATGTGTGCGGATGT
                                                                                                                                                                                               AAATTATGATTTGATAAAATGATTACATGAATCAG----TTTCATATTTTAAGCTATAAA 469
                                                                                                                                                                                                                                                                                      TTGTTTCCTTTCTTTTCAGAACCTGATGATTCCTACTCCTGAAAATAAAAATGTAAGTT
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                             AAAT-TATGTGCTTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTA
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                                                                                                                                                                             <u>AAATTATGATTCAGTAAAATGATGGCATGAATAAGTAAATTTCCTGTTTTAAGCTGTAAA</u>
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ilarity 67.8%;
Conservative
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Pred. No. 1.7e-131;
0; Mismatches 384;
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Indels 191; Length

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                                  CAATATCT-----CCTCTGTTCTTTTAACAGAAAAGGTGTGCAGGAGAAAGATGGAGAG 1550
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TAATACCTATTGTCATTTTTCTTTTTCACAGAAAAAGTGTGGAGAAGAAGACGCGAGAG
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RESULT 5
US-09-322-409-82/c
Sequence 82, Application US/09322409
Patent No. 6471957
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US-09-322-409-80
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GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Ureitz, Matthew J.
APPLICANT: Wonderling, Remani S.
APPLICANT: Wonderling, Remani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION DATE: 1998-05-29
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REPERBUCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 80
SEQ ID NO 80
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Best Local Similarity
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ORGANISM: Canis familiaris
FEATURE:
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LOCATION: (29)..(430)
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Pred. No. 6.7e-31;
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REPERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
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US-09-451-527-80
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; ORGANISM: Canis familiaris
US-09-322-409-82
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; NAME/KEY: CDS
; LOCATION: (29)..(430)
US-09-451-527-80
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LENGTH: 610
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Best Local Similarity
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                                                                                                                                                                                     Matches
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SOFTWARE: Patentin Ver. 2
                                                                                                                                                                                                                                                                                                         LENGTH: 610
TYPE: DNA
ORGANISM: Canis familiaris
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5. 6482403
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                                                                                                                                                                                                     Similarity
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                   AGACCTTGACACTGCTCCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCT
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AGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATGA
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                                                                                                                                                                                     Conservative
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                                                                                                                                                                                    Score 171.8; DB 4;
Pred. No. 6.7e-31;
0; Mismatches 12;
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Pred. No. 6.7e-31;
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Paritz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: SOF05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 83
LENGTH: 402
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US-09-322-409-83
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TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-82
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LENGTH: 610
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
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Patent No. 6482403
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APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CAININE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1999-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
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Pred. No. 6.7e-31;
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUC:
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT APPLICATION NUMBER: 05/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
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; ORGANISM: Canis familiaris
US-09-322-409-83
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US-09-451-527-83
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Best Local Similarity 92.7
                                                                                                                                           Sequence 83, Application US/09451527 Patent No. 6482403
                                                                                                                       GENERAL INFORMATION:
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Best Local
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APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Breitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Canis familiaris
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92.7%;
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Pred. No. 7.6e-25;
Viematches 12;
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Pred. No. 7.6e-25;
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RESULT 11
US-09-451-527-84/c
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TYPE: DNA
; ORGANISM: Canis familiaris
US-09-451-527-83
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Best Local S
Matches 153
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 83
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LENGTH: 402
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Best Local Similarity
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-15-28
ERRLIER FILING DATE: 1999-05-28
ERRLIER FILING DATE: 1999-05-28
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CURRENT APPLICATION NUMBER: US/09/451,5
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER FPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
                                                                                                                                                                                                                                                                                    ORGANISM: Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 174
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                            EARLIER APPLICATION NUMBER: 60/087,306 EARLIER FILING DATE: 1998-05-29
                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                Local Sin hes 153;
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                           CGAACTTGGCTGATAGGCGATGGGGTAATTTTCTTTTTGATTCCT
                                                                      GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGACCTTGACACTGCTCTCCACTCAT
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Pred. No. 7.6e-25;
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Pred. No. 7.6e-25;
0; Mismatches 12;
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                                                                                                                                                                                                                                               Length 402;
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US-09-322-409-85
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US-09-371-615A-1
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APPLICANT: IDEXX LABORATORIES
                                                                                                                                                                                                                      SEQ ID NO 85
LENGTH: 345
TYPE: DNA
ORGANISM: Canis familiaris
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Best Local :
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Patent No. 6537781
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                                                                                                           Query Match
                                                                          Matches
                                                                                         Best Local
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REPERENCE: IM-2-CI MOLECULES, AND USES THEREOF FILE REPERENCE: 1999-05-28
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
RUMBER OF SEQ ID NOS: 154
COURTMENT DESCRIPTION OF SEQ ID NOS: 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING TITLE OF INVENTION: CANINE INTERLEUKIN 5 FILE REFERENCE: 03604001700US00 CURRENT APPLICATION NUMBER: US/09/371,615A CURRENT FILING DATE: 1999-08-10 NUMBER OF SEQ ID NOS: 8 SOFTMARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                              FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(345)
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97.1%;
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                                                                      Score 131.6;
Pred. No. 1.6e
0; Mismatches
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Pred. No. 7.6e-25;
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                                                                                                                                                                                                                                                                                                                                                        Patent No. 6482403
GENERAL INFORMATION:
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SEQ ID NO 85
LENGTH: 345
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                                                                                                                                                              APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REPERENCE: IM-2-CZ
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
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APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Ureitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
FOREITER AND ICATED. 67-06-26
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EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
                                       EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                           EARLIER APPLICATION NUMBER: 09/322,409 EARLIER FILING DATE: 1999-05-28
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                                                                                                       EARLIER APPLICATION NUMBER: 60/087,306
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TYPE: DNA
ORGANISM: Canis familiaris
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Pred. No. 1.6e-21;
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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Perfect score:
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1: gb ba:*
2: gb htg
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AR535365 Homo sapi
AC004042 Homo sapi
AC079320 Homo sapi
AC150628 Papio anu
AR136275 Sequence
E01640 gene for hu
AR364536 Sequence
X12706 H.sapiens g
J03478 Human inter
E13592 gDNA encodi
L48478 Homo sapien
AC148886 Otolemur
AC148886 Otolemur
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ALIGNMENTS

ORIGIN	5'UTR CDS	mRNA	FEATURES		TITLE JOURNAL	AUTHORS	PUBMED	MEDLINE	JOURNAL	TITLE	AUTHORS	Danabado	ORGANISM	KEYWORDS	ACCESSION VERSION	DEFINITION	RESULT 1 AF331920
/note="IL-5" /codon_start=1 /product="interleukin-5" /protein_id="AAL10716.1." /db_xref="G1:15919183" /db_xref="G1:15919183" /translation="mrmLinlsilalgaayvsafavenpmurlvaetittlsthrtwilgenimiptpenkuh0LCIKEVFQGIDTLKNQTAHGEAVDKLFQNLSLIKEHIERQK KRCAGERWRVTKFLDYLQVFLGVINTEWTPES" 16221658	/product="interleukin-5" 126 join(27170,374406,12761404,15231621)	/organism="Canis familiaris" /mol_type="genomic DNA" /db xref="taxon:9615" join(1170,374406,12761404,15231658)	Location/Qualifiers 11658	Prospect Parkway, Ft Collins, CO 80525, USA	Direct Submission Submitted (22-DEC-2000) Immunology, Heska Corporation, 1613	Yang, S.	2 (hasee 1 to 1658)	21334408	expression of biologically active recombinant protein J. Interferon Cytokine Res. 21 (6), 361-367 (2001)	Canine interleukin-5: molecular characterization of the gene and	Yang.S., Sellins.K.S., Weber.E. and McCall.C.	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleoscomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis. 1 (bases 1 to 1658)			AF331920 AF331920.1 GI:15919182	AF331920 1658 DP DNA IINEAR MAM 04-OCT-2001 Canis familiaris interleukin-5 gene, complete cds.	

Ul7052 Ovis aries

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Boul	61 GCTAGAACTATACGAGGAAATTCTGAGGTGAGGTAAATCAGTAAGGCAGTTGTATTATAC 1	, В
by H.D.Campbell, 09-58P-1987. by H.D.Campbell, 09-58P-1987. LOCATION/Qualifiers	61 GCTAGAACTATACGAGGAAATTCTGAGGTGAGGTAAATCAGTAAGGCAGTTGTATTATAC 10	ર્જ ક
	901 ATGGTCATATTAAAANGTTAAAAATGTGATATCATTAGGTCTAAATAGAATAAAATTACCA 960	g &
encoding human eosinophil differentiation f JOURNAL Proc. Natl. Acad. Sci. U.S.A. 84 (19), 6629 MEDLINE 88016145 PURMED 3498940	841 ACTTCCACATATTTAAATGATTTTTAACTCTAATGGAATCATATACATCTGGAGTATGTC 900	р Q
er, W.Q., Ho anderson, C nucleotide	ATTTT ATTTT	p Q
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z	661 GGCATTCTTTCCAAAAGAATTCCATATTGGGTCAGAGATACTTCCTAGGCTCCATTCACC 720	B &
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1621 AGAACAAACCGGCTTATTGTAGTGGAAGATTTTGGAGA	541 TTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTAGAATCCATTAAG 600	B 8
	481 CATTGGGATGATTTAATTTTATCTATTTTGTTTTTATGTGTGCGGATGTAAATTATGTGC 540	B 8
1501 ATCTCCTCTGTTCTTTTAACAGAAAAGGTGTGCAGGAGAA	421 GATTTGATAAAATGATTACATGAATCAGTTTCATATTTTAAGCTATAAAGTATCAGTTAA 480	B &
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1381	301 TCAGAAGAATTATATAAAAGTTATGAACCTTACAATACATTAAAAATGAATG	g &
1321	241 GATCCATTATCAATAATGAAGTAATGAGTGTTAATAATATATAATGGGTAACCATGTTAC 300 	D Q
1261 AICTICCICATTAGCACCAACTGTGCATTAAAGAAGTTT 1261 AICTICCTCATTTAGCACCAACTGTGCATTAAAGAAGTTT 1261 AICTICCTCATTTAGCACCAACTGTGCATTAAAGAAGTTT	181 TTTTGATTCCTACAGTCTTTAAAATGCATGGGTAATTGGTGGTGGTGGTGGCTAGTTTTTAAA 240	99 VQ
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Oy 1081 AATTATATAACATCATTTACTTATGGTAATTATAGCTTAG	1 AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC 60	B &
1021 1021	Query Match 100.0%; Score 1658; DB 4; Length 1658; Best Local Similarity 100.0%; Pred. No. 3.9e-290; Matches 1658; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Que Bes Mat

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|AAGATGGAGAGTGACAAAGTT 1560
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rtinson, M.E., Mayo, G., ung, I.G. and expression of the gene on factor (interleukin 5) 6629-6633 (1987) se for [1] kindly provided e: beta-EDFH-1.) (clone linear PRI 29-APR-1996 ertebrata; Euteleostomi; Hominidae; Homo. eukin 5.

Qy 181 TTTTGATTCCTACAGTCTTTAAAATGCATGGGTAATTGGTGGTGGTGGTGGTTGTTAGTT 234	Qy 121 AGACCTTGACACTGCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCT 180	Qy 61 TTGGGGCTGCCTATGTTTCTGCCTTTGCATAGAAAATCCCATGAATAGACTGGTGGCAG 120	Qy 1 AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC 60	Query Match 38.3%; Score 634.6; DB 9; Length 3241; Best Local Similarity 68.6%; Pred. No. 4.9e-105; Matches 1226; Conservative 0; Mismatches 374; Indels 187; Gaps 18;	/gene= /note= /numbe 1 bp upstream o	/gene="IL5" /note=="600-120-097" /number=3 /number=3	/gene="IL5" /note="G00-120-097" /number=3 intron 20162120	H / / /	/ Yerre 115 /note="600-120-097" /number=2 intron 937. 1886	/gene="115" /nocte="G00-120-097" /number=1 exon 904.936	/gene="Lbb" /producte="interleukin 5" /note="g00-120-097" intron 696 903	### ##################################		/note="precursor" /codon_start=1 /product="interleukin 5" /protein_id="AAA98620.1" /db_xref="GI-186821"	/nuce="incerteuxill b precursor; GVV-12V-09/" /number=1 /number=1 /number=1 /oin(552695,904936,18872015,21212219) /gene="IL5" //gene="IL5"		/db_xref="taxon:9606" /map="5q23-q31" /clone="beta-EDFH-1." /clone lib="lambda-EDFH-1" /clone 5082586
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1 (bases 1 to 5186)

Rieder, M.J., Carrington, D.P., Chung, M.-W., Lee, K.L., Poel, C.L.,
                                                                                                                                                                                                                                                                                                      Submitted (25-FEB-2001) Molecular Biotechnology, Uni
Washington, 1705 NE Pacific, Seattle, WA 98195, USA
TO cite this work please use: SeattleSNPs. NHLBI Pr
Genomic Applications, UM-FHCRC, Seattle, WA (URL:
http://pga.mbt.washington.edu).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
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57186 bp DNA linear 3 5, P1 clone 96c7, P1 5001

PRI 27-JAN-1998 (LBNL H21),

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Homo sapiens chromosome scomplete sequence.
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HTG. Homo sapiens (human) Homo sapiens

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eature region region region region	region region	/or /mo /mo /ch /ch /ch /ch /ch /ch /ch /ch /ch /ch		Unpublished 2 (bases 1 to 57186) 2 (bases 1 to 57186) Ricke,D.O. and Wagner,R.P. Large Scale Sequence Analysis and Annotation with the Sequence Comparison Analysis (SCAN) System Unpublished 3 (bases 1 to 57186) Connolly,K.S., Gunning,K.M., Davis,C.A., Kadner,K., Subramanian,S., Miguel,T., Lewis,K.D., Fridlyand,J., Alcivare,D., Benke,J.A., Bondoc,M., Bowen,E., Chiang,A., Critz,P., Jaklevic,M.A., Lindo,K., Lindquist,K., Miller,C., Patel,S., Piscla,C., Riley,B.E., Lindquist,K., Sarmiento,R., Yu,C., Montenegro,M., Moise,H., Blazej,R., Flanagan,J., Stultz,J.L. and Martin,C.H. Direct Submission	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 57186) Connolly, K.S., Gunning, K.M., Davis, C.A., Kadner, K., Subramanian, S., Miguel, T., Lewis, K.D., Fridlyand, J., Alcivare, D., Benke, J.A., Bondoc, M., Bowen, E., Chiang, A., Critz, P., Jaklevic, M.A., Lindo, K., Lindquist, K., Miler, C., Patel, S., Piscia, C., Riley, B.E., Lindo, K., Sarmiento, R., Yu.C., Montenegro, M., Moise, H., Blazej, R., Flanagan, J., Stultz, J.L. and Martin, C.H. Sequencing of human chromosome 5
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188	Q {	Db 38430 TTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCACACAGTGCATTGGTGAAAG 38489	6 1
1128 GTGGTTTCCCACCTGGAAAAGACACAAGTAAAAACCTCTTTGGGAGAAAGGGAACTTGTGTA 1187	라 &	61 TIGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAAATCCCATGAATAGACTGGTGGCAG	o.
39417 AAACTCCTCAGTAATCATATAAGCTTCATCTACTTTTTGAAAATTTTATCTTAATATGTG 39476	р С	OY 1 AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC 60	ם ם
39359 TGCATTACACTTCCAAAACATTTTTTTCCAGTTACATAATTAAGTTATATCCTTTATA 39416	D &	Query Match 38.3%; Score 634.6; DB 9; Length 57186; Best Local Similarity 68.6%; Pred. No. 2.9e-105; Matches 1226; Conservative 0; Mismatches 374; Indels 187; Gaps 18;	
39305 ĀTĀĀĀĀCTĀCCĀGCTĀĠĀĀCTGTĀGĀĀĀCĀĞĀTTĠĀTĀTGĀGTTTĀĀTGTĀTĀĀ 39358) B	repeat_region	
949 ATAAAATTACCAGCTAGAACTATACGAGGGAAATTCTGAGGTGAGGTAAATCAGTAAGGCA 1008	Q	repeat_region complement(\$374354078) /rpt family="Alu"	
39245 TTTGAATATGTCCTGGTCATATTAAAATGTAAAATATATAGTTTTATTAGTCTAAATAGA 39304	дb	repeat_region complement(5307453167) /rpr family="MIR"	
889 CTGGAGTATGTCATGGTCATATTAAAATGTTAAAAATGTGATATCATTAGTCTAAATAGA 948	Ş		
39186 -CTATATTAATTATTCTGCATACTTAAATTATTATGACTATATGATGGTGTTGTATGCA 39244	DЬ	/rpt_family="Alu" region 5147251783	
829	Ş	region	
769 ACTTGGGGTTATATTTTTAGAATTATGGTCAGTAGACATGAAATATATACAGTGAAGTCCT 828	g 29	repeat_region 49535. 49746 /rpt_family="MER20" repeat region 5040850709	
39072 TCTCCGTGCAGTTCTGACTCTTTCTCACTCTAACGTGTTTCTGAAAGTATTAGCA 39126	g	repeat_region 49096 .49467 /rpt_family="Alu"	
709 GCTCCATTCACCTCTGTCGTTGGCTTTCCTCACCTCAACGTTTTTTCTGAAAGTACTAGCA 768	Ş	repeat_region 4872748852 /rpt_family="Alu"	
39012 AGCATCGTGTCAGGGATTCTTTCCAGAAGGATTCCACACTGAGTGAG	da	repeat_region 47706. 48028 /rpt family="Alu" /rpt family="Alu"	
649 AGCCTCGTGTCAGGCATTCTTTCCAAAAGAATTCCATATTGGGTCAGAGATACTTCCTAG 708	δ	repeat_region complement (4376544244)	
38953 GAATCCTTTAAACAAGTGGATTAGGCTCTTTGGTGATGTTGTTAGTT-TGCCTCCCAAAG 39011	Db	/rpt_family="Alu" complement(43399	
589 GAATCCATTAAGCAAGTGGATCAGGCCCTTTTTTTGATGTTGTCAGTTCTCCATCTCAAAG 648	8	/rpt	
38908 GAATGTCTGTACTTATAAATATGAGGAATGACTTTTTATCAAGTA 38952	Вb	repeat_region complement(4309143399)	
530 AAAT-TATGTGCTTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTA 588	Ş	N	
38848 TCATTAGTTATCGTTGGAACTATTTAATTTTCTATATTTTGTTTTCATATGGGTGGCTGT 38907	Db	Þ	
470 GTATCAGTTAACATTGGGATGATTTAATTTTATCTATTTTGTTTTTATGTGTGCGGATGT 529	&	/note="IL-5 interleukin 5" misc_feature 40501 .41085	
	da	/note="IL-5 interleukin feature 3823138410	
414 AAATTATGATTTGATAAAATGATTACATGAATCAGTTTCATATTTTAAGCTATAAA	Ş {	/rpt_family="Alu" eature 37847, 38001	
334 IIIIIVOIIIIVOITI KANAACUUMIUMIUMIUMIUMIUMA KANAARIA IIVOSII 413 38729 - TATTTOCTTTTOCTCTCAGACTTCTGAGGATTCCTGTTCTGTACATAAAAATGTAACTT 38787	당 성	repeat_region complement(3590936503)	
38669 ACATCACCAGCAAACATTCTGTTAAAAGTTATGAATGCTGGTGTGTGT	g: B	_region comple	

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REFERENCE
AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Birren, B., Linton, L., Nusbaum, C., Lander, E., Abraham, H., Allen, N., Anderson, S., Barna, N., Bastien, V., Beda, F., Boguslavkiy, L., Anderson, S., Barna, N., Bastien, V., Beda, F., Boguslavkiy, L., Boukhgalter, B., Brown, A., Campopiano, A., Castle, A., Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Ferreira, P., Fithugh, W., Gage, D., Galagan, J. Gardyna, S., Ginde, S., Goyette, M., Graham, L., Grand-Pierre, N., Hagos, B., Heaford, A., Horton, L., Iliev, I., Johnson, R., Jones, C., Kann, L., Karatas, A., LaRocque, K., Lamazares, R., Landere, T., Lehoczky, J., Levine, R., Lieu, C., Liu, G., Macdonald, P., Marquis, N., McCarthy, M., McBwan, P., McKernan, K., McPheeters, R., Meldrim, J., Meneus, L., Mihova, T., Mlenga, V., McPheeters, N., Pisani, C., Pollara, V., Norman, C.H., O'Connor, T., O'Donnell, P., O'Neil, D., Olivar, T.M., Olivar, J., Peterson, K., Pierre, N., Pisani, C., Pollara, V., Raymond, C., Rieback, M., Riley, R., Sougnez, C., Spencer, B., Stange-Thomann, N., Stojanovic, N., Strauss, N., Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J., Tirrell, A., Trayers, M., Trigilio, J., Vassliiev, H., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W.J., Young, G., Zainoun, J., Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       39832
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                                                                                           Direct Submission

Submitted (27-AUG-2000) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

(bases 1 to 160042)

Birren,B., Linton,L., Nusbaum,C., Lander,E., Ali,A., Allen,N.,
Anderson,S., Barna,N., Bastien,V., Boguslavkiy,L., Boukhgalter,B.,
Anderson,S., Barna,N., Canarata, C., Chararo,B.,
Choepel,Y., Colamarata, Collymore,A., Cook,A.,
Choepel,Y., Colamarata, C., Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Choepel, Ch
Cooke,P., DeArellano,K., Dewar,K., Diaz,J.S., Dodge,S., Faro,S.,
Ferreira,P., FitzHugh,W., Gage,D., Galagan,J., Gardyna,S.,
Ginde,S., Gord,S., Goyette,M., Graham,L., Grand-Pierre,N.,
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1 (bases 1 to 160042)
Birren, B., Nusbaum, C. and Lander, E.
Homo sapiens chromosome 5, clone RP11-729C24
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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AC079320
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Birren, B., Musbaum, C., Lander, S., Ali, A., Allen, N., Anderson, S., Barra, N., Bastien, V., Bloom, T., Boguslavkiy, L., Boukhgalter, B., Coa, A., Coake, P., DaFellano, K., Dewst, K., Disser, K., Jagos, B., Horton, L., Huhne, W., Tliev, I., Johnson, R., Jones, C., Kanat, A., Karatas, A., Kalls, C., Landers, T., Levine, R., Lindblad-Toh, K., Liu, G., MacCearthy, M., Meneus, L., Mihova, T., Mlange, V., McCarthy, M., Meneus, L., Mihova, T., Mlange, V., McCarthy, M., Meneus, L., Mihova, T., Mise, C., Rogov, P., Smith, C., Spencer, B., Schauer, S., Schupback, R., Seaman, S., Severy, P., Smith, C., Spencer, B., Stange-Thomann, N., Stojanovic, N., Talamas, J., Teefaye, S., Theodore, J., Topham, K., Travers, M., Vassiliav, H., Viel, R., Vo, A., Milson, B., Wu, X., Wyman, D., Young, G., Zainoun, J., Talamas, J., Tee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (14-JUL-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Jul 14, 2002 this sequence version replaced gi:18677463. All repeats were identified using RepeatMasker: Smit, A.F.A. & Green, P. (1996-1997) http://ftp.genome.washington.edu/RM/RepeatMasker.html
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------ Project Information
Center project name: L10831
Center clone name: 729_C_24
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complement (942. .1226)
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                                                                          family="AluSx"
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829 ATATTAATAGTCACTTCCACATATTTAAATGATTTTTAACTCTAATGGAATCATATACAT 888	40 V		Y="MER81" (2704827 Y="AluSx"	
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Similarity 68.6%; Pred. No. 2.4e-105; 6; Conservative 0; Mismatches 374;			complement(69587045) / rpt_family="LIM1" 70717301	repeat_region
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Homo saplens
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                         Homo sapiens chromosome
AC116366
AC116366.2 GI:21070669
                                                                                                                                           AC116366
                                                                                                                                                                                                                                             CGGAAAGTTGAGAACAAACCGGCTTATTGTAGTGGAAGATTTTTGGAG 1657
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                                                           sapiens (human)
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          Chordata;
Primates;
                                                                                                                        169385 bp
me 5 clone
           Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                        DNA
RP11-89G4,
                                                                                                                        linear
complete
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sequence.
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Best Local Similarity
Matches 1226; Conserv
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DOE Joint Genome Institute.
DIRECT Submission
Submitted (27-MAR-2002) Production Sequencing Facility, DOE Joint
Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA
3 (bases 1 to 169385)
DOE Joint Genome Institute and Stanford Human Genome Center.
Direct Submission
Submitted (22-MAY-2002) DOE Joint Genome Institute, 2800 Mitchell
Drive, Walnut Creek, CA 94598, USA
On May 22, 2002 this sequence version replaced gi:19745048.
Draft Sequence Produced by DOE Joint Genome Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCTC
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DOE Joint Genome Institute and
Direct Submission
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www-shgc.stanford.edu
Quality: Phrap Quality >=40 99.9% of Sequence;
Estimated Total Number of Errors is 0.1.
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                                                                         TCATTAGTTATCATTGGAACTATTTAATTTTCTATATTTTGTTTTCATATGGGTGGCTGT
                                                                                                                                                             AAATTATGATTTGATAAAATGATTACATGAATCAGT-----TTCATATTTTTAAGCTATAAA
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                                          AAAT-TATGTGCTTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTA
                                                                                                     AAATTATGATTCAGTAAAATGATGGCATGAATAAGTAAATTTCCTGTTTTAAGCTGTAAA
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="5"
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Pred. No. 2.4e-105;
0; Mismatches 374;
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TAATACCTATTGTCATTTTTCTTTTTTCACAGAAAAAGTGTGGAGAAGAAGACGGAGAG
                                          CAATATCT-----CCTCTGTTCTTTTAACAGAAAAGGTGTGCAGGAGAAAGATGGAGAG
                                                                                                                            AATAAAGAAATACATTGACGGCCAAAAAGTAAGTTACACACATT-----CAATGGAAGCT
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Bouffard, G.G., Brinkley, C., Brooks, S., Chu, G., Coleman, B.,
Bouffard, G.G., Brinkley, C., Brooks, S., Chu, G., Coleman, B.,
Coleman, H., Daki, N., Engle, J., Guan, X., Gupta, J., Haghighi, P.,
Han, J., Hansen, N., Ho, S.-L., Hu, P., Hurle, B., Idol, J.R., Jones, C.,
Karlins, E., Kim, H., Kwong, P., Laric, P., Larson, S., Lee-Lin, S.-Q.,
Legaspi, R., Madden, M., Maduro, Q.L., Maduro, V.B., Margulies, E.H.,
Masiello, C., Maskeri, B., McDowell, J., Mullikin, J.C., Paguirigan, C.,
Park, M., Portnoy, M. E., Prasad, A., Puri, O., Reddix-Dugue, N.,
Schandler, K., Schueler, M.G., Shah, K., Sison, C., Stantripop, S.,
Thomas, J.W., Thomas, P.J., Tsipouri, V., Vogt, J.L., Wetherby, K.D.,
Vonca, A., and Green F. D.
                                                                                                                                                                                                                 Submitted (31-AUG-2004) NIH Intramural Sequencing Center, 8717 Grovemont Circle, Gaithersburg, MD 20877, USA On Aug 31, 2004 this sequence version replaced gi:50726786.
                                                                                                                                                                                                                                                                                                                                                               Direct Submission
Submitted (28-OUL-2004) NIH Intramural Sequencing
Grovemont Circle, Gaithersburg, MD 20877, USA
3 (bases 1 to 157168)
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HTG; HTGS PHASE2; HTGS DRAFT.
Papio anubis (olive baboon)
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Papio anubis clone RP41-38K18, WORKING DRAFT SEQUENCE, 8 ordered
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished
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                                                 Web site: http://www.nisc.nih.
Contact: nisc_zoo@nhgri.nih.go
Center project name: hbu Center clone name: 038K18
                                                                                                                                  Center: NIH Intramural Sequencing Center code: NISC
                                                                                                                                                                                            ----- Genome Center
                                                                                                                                                                                                                                                                                                           Submission
                                                                                                                                                                     Center
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The sequence data in this record represents an 'enhanced' version of a Phase 2 submission. Specifically, the indicated order and orientation of each sequence contig has been established using one or more of the following: read-pair data from individual subclones, overlaps with neighboring clones, alignment with available reference sequence (e.g., human), and/or confirmation by PCR testing. In addition, the sequence assembly is based on at least 8X average coverage in Q20 bases and has been reviewed to rule out gross misassemblies, the low-quality ends of sequence contigs have been trimmed away, and each base is associated with a Phrap-derived quality score.

Sequencing vector: plasmid; n/a; 100% of reads Sequencing vector: plasmid; n/a; 100% of reads Assembly program: Phrap; version 0.990319

Consensus quality: 154676 bases at least Q40

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                                                                 37254 AGGCAAAAGGAGAACATTTCAGAACCGTGAGGATGCTTCTACATTTTGAGTTTTGCTAGCTC 37195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        * NOTE: This is a 'working draft' sequence. It currently
* consists of 8 contigs. Gags between the contigs
* are represented as runs of N. The order of the pieces
is believed to be correct as given, however the sizes
of the gags between them are based on estimates that have
provided by the submittor.

* This sequence will be replaced
by the finished sequence as soon as it is available and
the accession number will be preserved.

1 1224: contig of 1224 bp in length
1325 3332: contig of 2008 bp in length
333 342: gap of unknown length
15417 20113: contig of 11984 bp in length
15517 20112: contig of 11984 bp in length
20113 12101: contig of 11984 bp in length
20113 121201: contig of 10989 bp in length
20213 121301: gap of unknown length
112302 121301: gap of unknown length
112302 121301: gap of unknown length
112302 121301: gap of unknown length
112302 123282: contig of 3854 bp in length
113283 153182: gap of unknown length
113283 153182: gap of unknown length
113283 153182: gap of unknown length
113383 153183: gap of unknown length
113383 153183: gap of unknown length
113383 153183: gap of unknown length
113383 153183: gap of unknown length
113383 153183: gap of unknown length
113383 153183: gap of unknown length
               61
      TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAG 120
                                                                                                         AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Consensus quality: 155662 bases at least Q30 consensus quality: 156222 bases at least Q20 Insert size: 171000; agarose-fp Insert size: 156468; sum-of-contigs Quality coverage: 9.84x in Q20 bases; agarose-fp Quality coverage: 10.75x in Q20 bases; sum-of-contigs Quality coverage: 10.75x in Q20 bases; sum-of-contigs Quality coverage: 10.75x in Q20 bases; sum-of-contigs Quality coverage: 10.75x in Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; sum-of-contigs Q20 bases; 
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/mol type="genomic DNA"
/db_xref="taxon:9555"
/clone="RP41-38K18"
/clone_lib="RP41"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="assembly_fragment
clone_end:T7
vector_side:left"
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vector_side:right"
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150056. .153282
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121302. .149955
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67.9%;
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                                                                                                                                                                                   Score 626.8; DB 2;
Pred. No. 6.2e-104;
0; Mismatches 392;
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                                                                                                                                                                                                                                           Length 157168;
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                                                                                                                                                                                                                                                    GTTGTATTATACCTCGTAAGCATTTATTTTTCATTAATCATTTCATTTATATCATTTTGTA 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGAGTATGTCATGGTCATATTAAAATGTTAAAAATGTGATATCATTAGTCTAAATAGA
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                                                                                                AAACTCCTCAGTAATCTTATAAGCTTCATCTACTTTTTGAAAATTTTTATCTCAATATGTG
                                                                                                                                                    ACACTTCTCAGTAATTATATAAACATCATTTAC-TTATGGTAATTATAGCTTAGTATAAG 1127
                                                                                                                                                                                                                                                                                                                                     ATGAAACTACCAACTAGAACTGTAGAAACACAT--TGATGTGAGTTTAATGTATAA----
                                                                                                                                                                                                                                                                                                                                                                                          ATAAAATTACCAGCTAGAACTATACGAGGAAATTCTGAGGTGAGGTAAATCAGTAAGGCA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTGAATATGTCCTGGTCATATTAAAATGTAAAATATATAATTTATTAGTCTAAATAGA
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Qy 61 TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAG 120	OY 1 AGGCAAACACTGAACATTTCAGAGCCTATGAGATGCTTCTGAATTTGAGTTTGCTAGCTC 60	Query Match 36.2%; Score 600.6; DB 6; Length 3230; Best Local Similarity 67.8%; Pred. No. 6.9e-99; Matches 1212; Conservative 0; Mismatches 384; Indels 191; Gaps 19;	rce ·	AUTHORS Dean, N.M., Karr TITLE Antisense modul JOURNAL Patent: US 6136 EATURES Locati	FCCC.	ITION Sequence 78 from patent US 6136603. SION AR136275 ON AR136275.1 GI:14476947 RDS	٠ (١٥ د د	Qy 1612 GGAAAGTTGAGAACAAACCGGCTTATTGTAGTGGAAGATTTTGGAG 1657	Qy 1552 GACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACC 1611	Qy 1498 AATATCTCCTCTGTTCTTTTAACAGAAAAGGTGTGCAGGAGAAAGATGGAGAGT 1551	Qy 1438 TATTTGTCTGACTCTGCCTGTTTTTTTTTTTTTTTTTACAAGAATTGACAGTTTCCTAC 1497	QY 1378 ATAAAAGAACACATAGAGCGCCAAAAAGTAAGTTAAAGACATTTGGCAAAAACTTAAGTA 1437	OY 1318 TTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTA 1377	OY 1258 AAAATCTTCCTCATTTAGCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACA 1317	OY 1214TIGGACCAAATTITTATGCCTTGTTTTGATGAATTATATTTTTT 1257	Db 36026 TGATGAATTAAAATGTATATATTTATGGTGTACAATATGATGTTTTGAAATATGTATA 35967	36086 AATACCACAAAACAAAGCCTAACTTTGTGGACCAAAATTGTTTTAATAATTATTTTTAAT 3	AACAAAAACTCTTTGGAGAAGGGAACTCATGTA 3
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REFERENCE
AUTHORS
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   source
                              Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 3230)

Dean, N. M., Karras, J.G. and Mckay, R.

Dean, N. M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 78 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Homo sapiens (human)
PN JP 2002539846-A/78

PD 26-NOV-2002

PP 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PI 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PI NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P3
PC A61P43/00, C12N15/02, C12N15/00
PC A61P43/00, C12N5/02, C12N15/00
CA Antisense modulation of interleukin-5 signal transduction
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PT source 1.3230

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26.MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
/organism='Homo sapiens
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                    TGAATATG----CCTGGTCATATTAAAATGTAAAATATATAGTTT-ATTAGTCTAAATAGA
                                          CTGGAGTATGTCATGGTCATATTAAAATGTTAAAAATGTGATATCATTAGTCTAAATAGA
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                                                                                                       ATATTAATAGTCACTTCCACATATTTAAATGATTTTTAACTCTAATGGAATCATATACAT
                                                                                                                                                   ACTCAGAATTATATTTTAGAACCATGATCAGTAGACATTAAAATATATAACAAATGCC-
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/db_xref="taxon:9606"
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Pred. No. 6.9e-99;
0; Mismatches 384;
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KEYWORDS
SOURCE
ORGANISM
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ACCESSION
VERSION
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E01640
LOCUS
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                               TITLE
JOURNAL
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Mammalia; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 3230) Honshiyo, Y., Takatsu, K. and Eba, S. HUMAN B CELL DIFFERENTIATION FACTOR Patent: JP 1988185387-A 2 30-JUL-1988; HONSHIYO YUU
                                                                                                                                                                                               gene for human B cell
E01640
E01640.1 GI:2169893
JP 1988185387-A/2.
                                                                                                                                                       Homo sapiens (human)
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Matches 1212;
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PN JP 1988185387-A/2
PN JP 1988185387-A/2
PN 30-JUL-1988
PF 21-SEP-1987 JP 1987236842
PF 22-SEP-1987 JP 1987236842
PR 20-SEP-1986 JP 86P 223284
PR 20-SEP-1986 JP 86P 223284
PR 20-SEP-1986 JP 86P 223284
PR 20-SEP-1986 JP 86P 223284
PR 20-SEP-1986 JP 86P 223284
PR 20-SEP-1986 JP 86P 223284
PR 20-SEP-1987 JCC CL2NS/00,C12P21/02,(C12N5/00,C12R1:91); CC CL2NS/00,C12P21/02,(C12N5/00,C12R1:91); CC chypothetical: No; CC topology: Linear; CC topology: Linear; CC topology: Linear; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdKCR-hIL-5gene; CC *source: clone=pdK
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        AAAT-TATGTGCTTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTA 588
                                                   TCATTAGTTATCATTGGAACTATTTAATTTTCTATATTTTGTTTTCATATGGGTGGCTGT
                                                                           TTGTTTCCTTTCTTTTCAGAACCTGATGATTCCTACTCCTGAAAATAAAAATGTAAGTT
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nilarity 67.8%;
Conservative
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1. .3230
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
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Best Local Similarity
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Location/Qualifiers
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Unclassified.
1 (bases 1 to 3230)
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Honjo,T., Takatsu,K. and Severinson,
Human B-cell differentiation factor
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AAAT-TATGTGCTTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTA
                                                                   GTATCAGTTAACATTGGGATGATTTAATTTTATCTATTTTGTTTTTATGTGTGCGGATGT
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Pred. No. 6.9e-99;
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ORIO	1437 ATATTTGTCTGACTCTGCCTGTTTTTTTTTTTTTTTTTACAAGAATTGACAGTTTCCTA 1496
	1377 AATAAAGAACACATAGAGCGCCAAAAAGTAAGTTAAAGACATTTGGCAAAAACTTAAGT 1436
•	1317 ATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTT 1376
<u> </u>	1257 TAAAATCTTCCTCATTTAGCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACAC 1316
	1215TGGACCAAATTTTATGCCTTGTTTTGATGAATTATATTTT 1256
	1745 TTGATGAATTAAAAAGTATATATATTTATTGTGTACAATATGATGTTTTGAAGTATGTAT
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	1188 AACCCCACAAAACAAAGTCTAACTTTT
	1128 GTGGTTTCCCACCTGGAAAAGACACAAGTAAAAACCTCTTGGGAGAAGGGAACTTGTGTA 1187
	1069 ACACTTCTCAGTAATTATATAAACATCATTTAC-TTATGGTAATTATAGCTTAGTATAAG 1127
J1-J1-V	1009 GTTGTATTATACCTCGTAAGCATTTATTTTCATTAATCATTTACATTTATATCATTTGTA 1068
FEAT	949 ATAAAATTACCAGCTAGAACTATACGAGGAAATTCTGAGGTGAGGTAAATCAGTAAGGCA 1008
AL JC COMP	889 CTGGAGTATGTCATGGTCATATTAAAATGTTAAAAATGTGATATCATTAGTCTAAATAGA 948
D OFF	829 ATATTAATAGTCACTTCCACATATTTAAATGATTTTTAACTCTAATGGAATCATATACAT 888
ACCE VERS KEYV	769 ACTTGGGGTTATATTTTTAGAATTATGGTCAGTAGACATGAAATATACAGTGAAGTCCT 828
RESI HSBC LOCU	709 GCTCCATTCACCTCTGTCGTTGGCTTTCCTCACCTCAACGTTTTTCTGAAAGTACTAGCA 768
לא. מם	649 AGCCTCGTGTCAGGCATTCTTTCCAAAAGAATTCCATATTGGGTCAGAGATACTTCCTAG 708
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X12706
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extent of mRNA is given according ph.IL-5-30 cDNA; Data kindly
supplied by Derwent Biotechnology Abstracts: Patent (EP_0_261_625,
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/number=3
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join(610. .696,905. .937,1883. .2011,2118.
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IANETLRIPVPVHKNHQLCTEEIPQGIGTLESQTVQGGTVERLFKNLSLIKKYIDGQK
KKCGEERRRVNQFLDYLQEFLGVMNTEWIIES"
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/mol type="genomic DNA"
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/db xref="reaxon:9606"
/clone="lambda 12, lambda 22, lambda 38"
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ACACTTCTCAGTAATTATATAAACATCATTTAC-TTATGGTAATTATAGCTTAGTATAAG
                                                               ATAMAACTACCAGCTAGAACTGTAGAAACACAT - TGATATGAGTTTAATGTATAATGC-
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Human interleukin 5 (IL-5) g
J03478
J03478 1 GI:186338
Colony stimulating factor; i
Homo sapiens (human)
Homo sapiens
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Tanabe, T., Konishi, M., Mizuta, T., Noma, T. and Honjo, T.
Molecular cloning and structure of the human interleukin-5
J. Biol. Chem. 262 (34), 16580-16584 (1987)
88059042
Direct Submission
Submitted (09-SEP-1987) T. Tanabe, Departments of Medicine,
Kyoto University Faculty of Medicine,
Location/Qualifiers
                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Homo sapiens
Eukaryota, Metazoa; Chordata; Craniata; Ver
Mammalia; Butheria; Primates; Catarrhini; H
1 (bases 1 to 3230)
Honshiyo,Y., Takatsu,K. and Eba,S.
PRODUCTION OF HUMAN B CELL DIFFERSWITATION
Patent: JP 1997215496-A 2 19-AUG-1997;
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JP 1997215496-A/2.
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strandedness: Double;
topology: Linear;
hypothetical: No;
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p 1997215496-A/2
p 1997216496-A/2
19-AUG-1997
21-SEP-1987 JP 1996206192
20-SEP-1986 JP 86P 223284
20-SEP-1986 JP 86P 223284
HONSHIYO YUU, TAKATSU KIYOSHI, EBA SEBERINSON PC
HONSHIYO YUU, TAKATSU KIYOSHI, EBA SEBERINSON PC
15/09,A61K38/00,A61K38/00,A61K38/00,C07H21/04,C07K14/47,
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1. .696
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697. .904
/number=1
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2012. .2117
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                                                                /number=3
2118. .3230
/number=4
join(553. .696,905. .937,1883. .2011,2118.
/product='BCDF'
                                                                                                                                                   /number=2
1883. .2011
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Matches 1211; Conserv
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  CTGGAGTATGTCATGGTCATATTAAAATGTTAAAAATGTGATATCATTAGTCTAAATAGA
                                          -- CTATATTAATAATTCTGCATACTTAAATAATTATGACTATATGATGGTGTGTATGCAT
                                                                       ATATTAATAGTCACTTCCACATATTTTAAATGATTTTTAACTCTAATGGAATCATATACAT
                                                                                                                                 ACTCAGAATTATATTTTTAGAACCATGATCAGTAGACATTAAAATATATAACAAATGCC-
                                                                                                                                                         ACTTGGGGTTATATTTTTAGAATTATGGTCAGTAGACATGAAAATATACAGTGAAGTCCT
                                                                                                                                                                                                                 TCTCCGTGCAGTTCTGAC----TCTTTCTCACTCTAACGTGTTTCTGAAAGTATTAGCA
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
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Location/Qualifiers
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Pred. No. 1.3e-98;
0; Mismatches 385; Indels 191;
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 3507)
Martin, C.H., Bondoc, M.M., Chiang, A., Cloutier, T., Davis, C.A.,
                                                            Homo sapiens (human)
                                                                                                         L48478.1
                                                                                                                         L48478
                                                                                                                                      Homo sapiens (subclone
                                                                                                                                                      HUM21DC94Z
                                                                                         interleukin gene cluster.
                                                                                                                                                                                                                                                CGGAAAGTTGAGAACAAACCGGCTTATTGTAGTGGAAGATTTTGGAG
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This subclone overlaps H21 6_b10 and H21 6_h1.

Sequence submitted by:
Human Genome Center
Lawrence Berkeley Laboratory

Berkeley, CA 94720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ericsson, C.L., Jaklevic, M.A., Kim, R.J., Lee, M.T., Li, M., Mayeda, C.A., Steiert-El Kheir, A. and Palazzolo, M.J. Sequencing of the interleukin gene cluster of homo sapie Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      e-mail: seq@genome.lbl.gov
The P1, from which this subclone
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                                                                                                                                           TGGCTTTCCTCACCTCAACGTTTTTCTGAAAGTACTAGCAACTTGGGGTTATATTTTTAG
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 ATACTTAAATAATTATGACTATATGATGGTGTTGTATGCATTTGAATATGTCCTGGTCAT
                                                            AACCATGATCAGTAGACATTAAAATATATAACAAATGCC--CTATATTAATAATTTCTGC
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1631 GGCTTATTGTAGTGGAAGATTTTGGAG 1657	1571 CTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGTTGAGAACAAACC 1630 	1511 TTCTTTTAACAGAAAAAGGTGTGCAGGAGAAAAGATGGAGAGAGA	1457 GTTTTTTTTTTTTTTTACAAGAATTGACAGTTTCCTACAATATCTCCTCTG 1510	1397 GCCAAAAGTTAAAGACATTTGGCAAAAACTTAAGTATATTTGTCTGACTCTGCCT 1456	1337 ACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTTAATAAAGAACACATAGAGC 1396	1277 ACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACACATTGAAGAACCAAACTGCCC 1336	1217 GACCAAATTTTTATGCCTTGTTTTGATGATTATATTTTTTAAAATCTTCCTCATTTAGC 1276	1214TTG 1216	1208 AACTTT 1213	GACACAAGTAAAAACCTCTTGGGAGAAGGGAACTTGTGTAAACCCCCACAAAACAAAGTCT	1089 AAACATCATTTACTTATGGT-AATTATAGCTTAGTATAAGGTGGTTTCCCACCTGGAAAA 1147 	1029 CATTTATTTTCATTAATCATTTATATCATTTGTAACACTTCTCAGTAATATAT 1088	969 TATACGAGGAAATTCTGAGGTGAGGTAAATCAGTAAGGCAGTTGTATTATACCTCGTAAG 1028	696 ATTAAAATGTAAAAATATATAGTTTATTAGTCTAAATAGAATAAAACTACCAGCTAGAAC 755	
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Aah92592 Human inf Aah92594 Human inf Aah92591 Human inf Aah92593 Human inf Aan71243 Sequence	Aaq73456 Human int Aaq73725 Human IL- Abx04379 Human. Int Adn12146 Intérleuk Adn12056 Human int	Aaf20978 Human low Abz96672 Human nuc Aaa34858 Human ade Aaf20980 Human low Abz96674 Human nuc Abd20522 Human pul Abd20522 Human pul Aaa11801 DNA encod	Description Aaa34856 Human ade

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or

WPI; 2000-205971/18.

Nyce JW;

(UYEC-) UNIV EAST CAROLINA

The present invention describes a new composition comprising an antisense

Disclosure; Page 715-716; 1343pp; English.

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6727	6727	399	816	816	816	816	816	816	918	816	385	393	345	345	5397	520	405	402	402	252	838	5397	610	610
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Aac73648 Murine IL		Aat50756 Ovine IL-	Adp56009 Human PRO	Adi31910 Human cDN	Acf63368 Human int	Abz96673 Human nuc	Adg33104 Human DNA	Aaf20979 Human low	Aaa13338 Human int	Aaa34857 Human ade	Aaa43842 Human sec	Aaf74306 Canine in	Aaz55551 Canine ma	Aaz55550 Canine ma	Abl33045 Human imm	Aat50755 Ovine IL-	Aaf74300 Canine in	Aaz55549 Canine in	Aaz55548 Canine in	Aaf74305 Canine in	Aaz44265 Porcine I	Abl33044 Human imm	Aaz55547 Canine in	Aaz55546 Canine in

ALIGNMENTS

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RESULT 1
AAA34856
Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothicate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthm
                                                                                                                                                                                                                                                                                                                               lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human adenosine receptor related polynucleotide SEQ ID NO:2545.
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CC oligonucleotide (ON) with low adenosine (up to 15%), which targets coucleic acids involved in bronchoconstriction, allergies, and/or CC inflammation. The ON can have antiinflammatory, antiallergic, countriasthmatic, cytostatic and analgesic activities. The compositions are CC useful for the treatment of diseases associated with inflammation, CC impaired airways, including lung disease and diseases whose secondary CC effects afflict the lungs of a subject. They can be used for treating CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impedied respiration, respiratory distress syndrome, pain, cystic CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive CC gulmonary disease (COPD), and cancers such as leukaemias, lymphomas, CC carcinomas, and cancers which may metastasise to the lungs, including CC carcinomas, and cancers which may metastasise to the lungs, including CC carcinomas, and cancers. The reduction of the adenosine content of the CC ONs reduces side effects. The A-containing ONs break down with the CC release of decxyadenosine which activates adenosine receptors causing CC bronchoconstriction and inflammation. AAA32313 to AAA53312 represent the CC release of decxyadenosine which activates adenosine from the present content of the present on the sequences side effects. The A-containing ONS break down with the CC useful of the present inthe last 185 cC from the present inthe last 185 cC from the present inthe last 185 cC from the present inthe last 185 cC from the present in the disclosure of the present invention do not match CC up with their corresponding SEQ ID NO: sequences given in the sequence collection on the sequence collection on the sequence sequences given in the disclosure of the present invention do not match collections.
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Best Local Similarity
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GAATCCATTAAGCAAGTGGATCAGGCCCTTTTTTGATGTTGTCAGTTCTCCATCTCAAAG
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                                                                                                               AAAT-TATGTGCTTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTA 588
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Pred. No. 1.5e-115;
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    TAAACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATAA
                                 TGACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACAC 1610
                                                                                            TAATACCTATTGTCATTTTTCTTTTTCACAGAAAAAGTGTGGAGAAGAAGACGGAGAG
                                                                                                                                      CAATATCT----
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                                                                                                                                                                                                                  AATAAAGAAATACATTGACGGCCAAAAAGTAAGTTACACACATT-----CAATGGAAGCT
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                The present invention describes low adenosine (A) content antisense CC oligonuclectides and compositions (I) comprising them. In the antisense CC oligonuclectides the A is replaced by a 'Universal' or alternative base. CC (I) can have respiratory, bronchodilator, antiinflammatory, analyssic, can have respiratory, bronchodilator, antiinflammatory, analyssic, communosuppressive, antiasthmatic, hypotensive and cytostatic activities. CC The antisense oligonucleotides and (I) can be used to down-regulate the CC expression and or activity of target polypeptides associated with CC lung/respiratory disorders and malignancies, such as stimulating and CC cativating peptide factors and transmitters, transcription factors, CC immunoglobulins and antibodies, antibody receptors, cytokines and CC chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adenosine receptors, bradykinin receptors, central consoling proteins, adenosine receptors, bradykinin receptors, central corrous system (CNS) and peripheral nervous and non-nervous system peptide cransmitters, defensins, growth factors, vasociated proteins. The continuous system proteins and malignancy associated proteins. The including respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, allergy(ies) and/or allergies after a condition selected from pulmonary vasoconstriction, allergy(ies) and/or allergies after a condition selected from pulmonary vasoconstriction.
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Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
                               Human nucleic acid sequence.
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Tang L,
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antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

23-APR-2002; 2002WO-US013135

24-APR-2001; 2001US-0286137P

PHARM

Sandrasagra A, L, Shahabuddin Katz E, Pabalan Ģ Aguilar

D

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

Disclosure; SEQ ID NO 11914; 872pp; English

CC first active agent compissing an oligonucleotide antisense to the CC initiation codon, coding region, 5' or 3' end genomic flanking regions, CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of CC junctions of genes encoding a polypeptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an and/or CC antiinflammatory, antiallergic, antiasthmatic, hypotensive, CC immunosuppressive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or CC preventing a respiratory, lung or malignant disease or condition, also CC of renhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of unguinone or CC lung surfactant in a subject's tissue, or treating bronchoconstriction, CC Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO or at figure.

Sequence 3241 BP; 1026 A; 546 C; 632 G; 1037 T; 0 U; 0 Other;

Length 3241;

AGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCT TTATGATTCCTACAGTCTGTAAAGTGCATAGGTAATCATTTGTGATGGTTCCTTTACTAT AGACCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGGTAATTTTCT TTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAG TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAG AGGCAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTC AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC TTTTGATTCCTACAGTCTTTAAAATGCATGGGTAATTGGTGGTGGTGGTGGTT------TTTAAAGATCCATTATCAATAATGAAGTAATGAGTGTTAATAATATATAATGGGTAACC Conservative 38.3%; 0; Mismatches 374; Score 634.6; Pred. No. 1.5 .5e-115; Indels 187; Gaps 180 645 60 705 585

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standard; DNA; 4057 ВP

28-JUL-2000 (first entry)

adenosine receptor related polynucleotide SEQ IJ NO:2547.

Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothicate; impaired respiration; infilammation; allergy; allergic disease; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary disease; coronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

WO200009525-A2

99WO-US017712

98US-0095212P

AIND EAST CAROLINA

WPI; 2000-205971/18.

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or

Page 717-718; 1343pp; English

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                     The present invention describes low adenosine (A) content antisense CC oligonucleotides and compositions (I) comprising them. In the antisense CC oligonucleotides the A is replaced by a 'Universal' or alternative base. CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. CC The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with CC lung/respiratory disorders and malignancies, such as stimulating and CI cung/respiratory disorders and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and CC chemokines, endogenously produced specific and non-specific enzymes, CC binding proteins, adhesion molecules and their receptors, cytokine and CC chemokine receptors, adenosine receptors, bradykinin receptors, cytokine and CC creoptors, CNS and peripheral nervous and non-nervous system (CNS) and peripheral nervous and non-nervous system creoptors, defensins, growth factors, vasociated proteins. The CC creoptors, binding proteins and malignancy associated proteins. The CC including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or confident hypoproduction which are associated with a disease or condition selected from nulmonary associated with a disease or condition selected from nulmonary associated with a disease or condition selected from nulmonary associated with a disease or condition selected from nulmonary associated with a disease or condition selected from nulmonary associated with a disease or condition selected from nulmonary associated with a disease or condition selected from nulmonary associated with a disease or conditions and conditions and conditions and conditions and conditions and conditions and conditions and conditions and conditions and conditions and conditions and conditions and conditions and condition
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4057 BP; 1303 A; 683 C; 796 G; 1275 T; 0 U; 0 Other;
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antiinflammatory steroid, ubiquinone; antiinflammatory, antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                    lung inflammation; respiratory disease; ds.
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Homo sapiens

23-APR-2002; 2002WO-US013135

24-APR-2001; 2001US-0286137P

(EPIG-) EPIGENESIS PHARM

Ś Li Y, Tang ۲ Sandrasagra A, L, Shahabuddin S Katz E, Pabalan Ģ Aguilar ā

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone

Disclosure; SEQ ID NO 11916; 872pp; English

CC junctions of genes encoding a polypeptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an CC antiinflammatory steroid and ubiquinone. A composition of the invention CC antiinflammatory, antiallergic, antiasthmatic, hypotensive, CC immunosuppressive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or CC preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapeutic respiratory effect of an CC antiinflammatory steroid in a subject, for reducing levels of adenosine cC interpretation bronchodilation, increasing levels of adenosine cC lung surfactant in a subject's tissue, or treating bronchoconstriction, CC lung inflammation, lung allergies, or a respiratory disease or condition. CC Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at figure in the printed at ftp.wipo.int/pub/published_pct_sequences The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5 or 3 end genomic flanking regions, 5 and 3 intron-exon junctions, or regions within 2-10 nucleotides of

Sequence 4057 BP; 1303 A; 683 C; 796 G; 1275 T; 0 u; 0

S 밁 S 밁 S 밁 Ś Matches Query Match Best Local : 1226; 181 121 586 61 Similarity AGACCTTGACACTGCTCCTCCACTCGATCGGACTTGGCTGATAGGCGATGGGGTAATTTTCT TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAG AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCTC TTTTGATTCCTACAGTCTTTAAAATGCATGGGTAATTGGTGGTGGTGGCTAGTT-----TTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAG AGGCANACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTC AGACCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGGTAATTTTCT Conservative 38.3**%**; 68.6**%**; 0 Score 634.6; DB 10; Length 4057; Pred. No. 1.5e-115; 0; Mismatches 374; Indels 187; Gaps 705 180 645 120 585 60 234

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TTATGATTCCTACAGTCTGTAAAGTGCATAGGTAATCATTTGTGATGGTTCCTTTACTAT

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ABD20523;
                                                                  pulmonary transplantation rejection; ds.
                                                                                                  29-JUL-2004
                                                                                                             ABD20523
                                                                                            pulmonary
                                                                                                             standard;
                                                                                                  (first
                                                                                            and inflammatory target DNA #134.
                                                                                                             DNA;
                                                                                                  entry)
                                                                                                             4057
                                                                                                             ВР
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Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; Homo sapiens.

WO200285309-A2

31-OCT-2002

23-APR-2002; 2002WO-US013143

24-APR-2001; 2001US-0286036P

EPIGENESIS PHARM INC

W, Li Y, Tang ŗ Sandrasagra A, L, Shahabuddin Katz S; 'n Pabalan ď, Aguilar Ď,

WPI; 2003-093058/08.

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Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, target nucleic acids associated with lung airway or lung dysfunction, bronchodilating agent. targeted ő

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CC expression of a target polypeptide associated with lung airway or lung conversion or cancer and can be anti-sense to the corresponding mRNA. CC The invention also describes a kit, that comprises: (a) a delivery CC device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a CC beta-adrenergic agonist. The composition is useful for preventing or CC treating a respiratory, lung or malignant disease. The administered CC composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to C reduce the amount of target polypeptide present in the lungs. The CC pulmonary obstruction, and/or bronchoconstriction and/or lung confilmmation, allergies and/or surfactant hypoproduction are associated confilmmation, allergies and/or surfactant hypoproduction are associated confilmmation, allergies, asthma, impeded respiration, respiratory confilmmation, allergies, asthma, impeded respiration, respiratory confilmmation, allergies, asthma, impeded respiration, respiratory confilms, pulmonary infections, bornochitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymdines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system confilms and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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Matches 1226;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4057 BP; 1303 A; 683 C; 796 G; 1275 T; 0 U; 0 Other;
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                                                                                                     This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung alrway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a betterarter of according to the composition of the according the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composition of the composit
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beta-adrenergic agonist. The composition is useful for preventing or
treating a respiratory, lung or malignant disease. The administered
composition comprises oligo and is administered to reduce the product
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Best Local Sim
Matches 1226;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or availability, or to increase the degradation of the target reduce the amount of target polypeptide present in the lungs pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are a
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         (GENA-) GENAISSANCE PHARM INC
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Homo sapiens
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The invention relates to haplotyping the human interleukin 5 (IL5) gene C of an individual, comprising determining if the individual has one of the IL5 applotypes or haplotype pairs fully defined in the specification.

C Haplotyping the IL5 gene of an individual, comprises determining the identity of the nucleotide at two or more polymorphic sites in one copy of the gene. The method also involves identifying an association between a trait and a haplotype or haplotype pair of the IL5 gene, comprising comparing the frequency of the haplotype/pair in a population exhibiting the trait with that of a reference population. A higher frequency in the trait population indicates the trait is associated with the haplotype. The polymucleotides and screened compounds are useful to develop inflammatory disorders such as asthma. The present sequence represents the coding sequence of interleukin 5 (IL5) as described in the method of
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Matches 1212; Conserv
                                                                                                                               Nucleotide sequence of the exon portions of the human BCDF chromosomal gene completely coincided with the nucleotide sequence of human BCDF cDI (AAN81380). The BCDF is useful in the diagnosis or treatment of e.g. immunodeficiency diseases occuring due to the deficiency of this factor in a living body and also in the treatment of various infections and cancers. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                         Recombinant human B-cell differentiation factor - used for diagnosis treatment of immuno:deficiency diseases, various infections and cance
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21-SEP-1987;
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04-DEC-1990
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                                                                         GTTGTATTATACCTCGTAAGCATTTATTTTTCATTAATCATTTCATTTATATCATTTGTA
                                                                                                                 ATAAAACTACCAGCTAGAACTGTAGAAACACAT---TGATATGAGTTTAATGTATAATGC-
                                                                                                                                                                                             TGAATATG---CCTGGTCATATTAAAATGTAAAATATATAGTTT-ATTAGTCTAAATAGA
                                                                                                                                                                                                                 CTGGAGTATGTCATGGTCATATTAAAATGTTAAAAATGTGATATCATTAGTCTAAATAGA
                                                                                                                                                                                                                                                                       -- CTATATTAATAATTCTGCATACTTAAATAATTATGACTATATGATGGTGTGTATGCAT
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WPI; 1995-211627/28
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                                                                                                                                                                                                 Interleukin-5;
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                                                                                                                                                                                                                                                                                      AAQ74056
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                          (HITB ) HITACHI CHEM CO LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAATACCTATTGTCATTTTTCTTTTTCACAGAAAAAGTGTGGAGAAGAAGAAGACGGAGAG
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                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                 primer; mRNA; specificity; pharmaceutical;
                                                       93JP-00275852
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Best Local Simi
Matches 1212;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ74056 is the human interleukin-5 gene. This gene is amplified by the primers AAQ74031-Q74032. The primers are used specifically for the detection and isolation of this sequence. They have the advantage of high sensitivity and reliability and are useful in the pharmaceutical industry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A primer for the detection and the determn. of a specific messenger can detect and determine specific mRNA(\mathfrak s) with high reliability.
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                            ACTTGGGGTTATATTTTTAGAATTATGGTCAGTAGACATGAAAATATACAGTGAAGTCCT 828
                                                                                   GCTCCATTCACCTCTGTCGTTGGCTTTCCTCACCTCAACGTTTTTTCTGAAAGTACTAGCA 768
                                                                                                                                           AGCCTCGTGTCAGGCATTCTTTCCAAAAGAATTCCATATTGGGTCAGAGATACTTCCTAG
                                                                                                                                                                                    GAATCCTTTAAACAAGTGGATTAGGCTCTTTGGTGATGTTAGTTTGCCTTCCCAAAG
                                                                                                                                                                                                   GAATCCATTAAGCAAGTGGATCAGGCCCTTTTTTGATGTTGTCAGTTCTCCATCTCCAAAG
                                                                                                                                                                                                                                         GAATGTCTGTACTTATAAATATGAGGAATGACTTT--
                                                                                                                                                                                                                                                             AAAT-TATGTGCTTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTA 588
                                                                                                                                                                                                                                                                                                                                                         AAATTATGATTCAGTAAAATGATGGCATGAATAAGTAAATTTCCTGTTTTAAGCTGTAAA
                                                                                                                                                                                                                                                                                                                                                                        AAATTATGATTTGATAAAATGATTACATGAATCAG----TTTCATATTTTTAAGCTATAAA 469
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                                                                                                                           ACATCACCAGCAAACATTCTGTTAAAAAGTTATGAATGCTGGTGTGCTGTAAAAATGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATAGAGATCTGTTATAAATAATAAGATTCTGAG-CACATTAGTACATGGGTGATAACT
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ilarity 67.8%;
Conservative
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Pred. No. 7.4e-109;
0; Mismatches 384; Indels 191;
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RESULT 12
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- TATTTCCTTTCCTCTCCAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATGTAAGTT

ATATAGAGATCTGTTATAAATAATAAGATTCTGAG-CACATTAGTACATGGGTGATAACT

ACATCACCAGCAAACATTCTGTTAAAAGTTATGAATGCTGGTGTGCTGTAAAAATGATTG

TTTTGATTCCTACAGTCTTTAAAATGCATGGGTAATTGGTGGTGGTGGTGGCTAGTT-----

TTATGATTCCTACAGTCTGTAAAGTGCATAGGTAATCATTTGTGATGGTTCCTTTACTAT

AGACCTTGACACTGCTCCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTTCT

TTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAG TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAG

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AGGCAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTC

0; Mismatches 384;

Indels 191;

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AGGCAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTTGAGTTTGCTAGCTC

527 61

Matches 1212;

Similarity

Conservative

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Query Match
Best Local
                                                                                The present sequence was used to design oligonucleotides for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptoralpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                 Sequence 3230 BP; 1027 A; 545 C; 622 G; 1036 T; 0 U; 0 Other;
                                                                                                                                                                                                                                          Example 22; Page 127-128; 156pp; English.
                                                                                                                                                                                                                                                                          syndrome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; interleukin-5; IL-5; signal transduction;
antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human IL-5 nucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                ISIS PHARM INC
                                                                                                                                                                                                                                                                        s oligonucleotide compound used to treat asthma and eosinophilic in humans modulates interleukin-5 signal transduction.
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36.2%;
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Score 600.6; DB 3; Pred. No. 7.4e-109;
              Length 3230
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                                   AATAAAAGAACACATAGAGCGCCAAAAAGTAAGTTAAAGACATTTGGCAAAAACTTAAGT
                                                                                                                        ATTGAAGAACCAAACTGCCCACGGGGAGGCTGTGGATAAACTATTCCAAAACTTGTCTTT
                                                                                                                                                                                              AAAAATTTTCCTCATTTAGCACCAACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCAC
                                                                                                                                                                                                                     TAAAATCTTCCTCATTTAGCACCAACTGTGCATTAAAGAAGTTTTTCAGGGTATAGACAC
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The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the expression of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC in-5 expression or IL-5 receptor a spression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound cc which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence

Example 20; Page 48-49; 77pp; English

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major histocompatibility class I; MHC-I; MHC-II; Cytostatic; EBV-associated cancer; Hodgkin's lymphoma; nasopharyngeal carcinoma; gastric carcinoma; Burkitt's lymphoma; T-cell lymphoma; B-cell lymphoma; parotid carcinoma; breast carcinoma; leiomyosarcoma; ds.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New human cell line modified to comprise and express genes encoding immunomodulators and an antigen of Epstein-Barr virus (EBV), useful for inducing or stimulating an immune response in a human to EBV-associated
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-5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylytoytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a speciated with IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; interleukin-5; IL-5; gene; ds; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar moiet 5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human interleukin-5
                                                                                                                                                                                                                                                                 The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                        Example
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2001US-00800629.
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                                                                                                                                                                                                                                                                                                      English.
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administering to the mammal a therapeutic or prophylactic amount of antisense compound so that IL-5 signal transduction, IL-5 or IL-5 receptor a expression, or IL-5 receptor a is modulated, the ratio of receptor a isoforms is altered, or expression of membrane IL-5 recepts modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome asthma. This sequence represents human IL-5 DNA of the invention.
545 C; 622 G; 1036 T; 0
    U; 0 Other;
                                                                                                                                                                                           receptor
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TTGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAG Score 600.6; I Pred. No. 7.4e-0; Mismatches .4e-109; DB 12; Indels Length 3230 191; Gape 586 60

ATATAGAGATCTGTTATAAATAATAAGATTCTGAG-CACATTAGTACATGGGTGATAACT TTATGATTCCTACAGTCTGTAAAGTGCATAGGTAATCATTTGTGATGGTTCCTTTACTAT TTTTGATTCCTACAGTCTTTAAAATGCATGGGTAATTGGTGGTGGTGGCTAGTT-----AGACCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGGTAATTTTCT AGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCT TTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAG 353 293 766 706 646 234

- TATTTCCTTTCCTCCAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATGTAAGTT TTGTTTCCTTTCTTTTCAGAACCTGATGATTCCTACTCCTGAAAATAAAATGTAAGTT ACATCACCAGCAAACATTCTGTTAAAAAGTTATGAATGCTGGTGTGCTGTAAAAATGATTG 413 885 944

GTATCAGTTAACATTGGGATGATTTAATTTTTATCTATTTTTGTTTTTATGTGTGCGGATGT AAATTATGATTTGATAAAATGATTACATGAATCAG----TTTCATATTTTTAAGCTATAAA AAATTATGATTCAGTAAAATGATGGCATGAATAAGTAAATTTCCTGTTTTAAGCTGTAAA 1004 469

AAAT-TATGTGCTTATGAATATTAGGAATGGTGTTAGGAATGGCTCTACAATATTAAGTA TCATTAGTTATCATTGGAACTATTTAATTTTCTATATTTTGTTTTCATATGGGTGGCTGT

GAATCCATTAAGCAAGTGGATCAGGCCCTTTTTTGATGTTGTCAGTTCTCCATCTCAAAG GAATGTCTGTACTTATAAATATGAGGAATGACTTT --TTATCAAGTA

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AGCCTCGTGTCAGGCATTCTTTCCAAAAGAATTCCATATTGGGTCAGAGATACTTCCTAG GAATCCTTTAAACAAGTGGATTAGGCTCTTTGGTGATGTTGGTTAGTTTGCCTTCCCAAAG 708 1169

GCTCCATTCACCTCTGTCGTTGGCTTTTCCTCACCTCAACGTTTTTTCTGAAAGTACTAGCA TCTCCGTGCAGTTCTGAC----TCTTTCTCACTCTAACGTGTTTCTGAAAGTATTAGCA 1228

ATATTAATAGTCACTTCCACATATTTAAATGATTTTTAACTCTAATGGAATCATATACAT ACTTGGGGTTATATTTTTAGAATTATGGTCAGTAGACATGAAAATATACAGTGAAGTCCT ACTCAGAATTATATTTTTAGAACCATGATCAGTAGACATTAAAAATATATAACAAATGCC-888 828 1283

THANANCTACCAGCTAGAACCTATAGAACCAT: -TGATATGAGTTTAAIGTATATGATTATAGTTATATGATTTAAIGTATATGATTATGATTTATGATTTATGATATATGATTATGATATATGATATATGATATATGATATATGATATATGATATATGATATATATGATATATATGATATATATGATATATATGATATATATGATATATATGATATATATGATATATATGATATATGATG	1611 CGGAAAGTTGAGAACAAACCGGCTTATTGTAGTGGAAGATTTTGGAG	1551 TGACAAAGTTCCTAGACTACCTGC	1497 CAATATCTCTCTGTTCTT	1437 ATATTTGTCTGACTCTGCCTGTTTT	1377 AATAAAAGAACACATAGAGGGGCAA 1984 AATAAAGAAATACATTGACGGCCAA	1317 ATTGAAGAACCAAACTGCCCACGGC	1257 TAPARTCTTCCTCATTTAGCACCAP	1215TGGACCA	1745 TTGATGAATTAAAAAGTATATATA	1215	1188 PACCCCACADARCADAGTCTAACTTTT	1128 GTGGTTTCCCACCTGGAAAGACAC 1629 GTGGTTTGTTGCCTAGAAAA	1069 ACACTTCTCAGTAATTATATAAACA 1569 AAACTCCTCAGTAATCATATAAGCT	1009 GTTGTATTATACCTCGTAAGCATTT	949 ATAAAATTACCAGCTAGAACTATAC 	889 CTGGAGTATGTCATGGTCATATTAJ
	165 225	TGACAAAGTTCCTAGACTACCTGCAAGTATTTCTTGGTGTAATAAACACCGAGTGGACAC 16 	N H	2 -	AATAAAAGAACACATAGAGCGCCAAAAAGTAAGTTAAAGACATTTGGCAAAAACTTAAGT 14 	io iu	to Lu	12	18	12	1 1	GTGGTTTCCCACCTGGAAAAGACACAAGTAAAAACCTCTTGGGAGAAGGGAACTTGTGTA 11 	ACACTTCTCAGTAATTATATAAACATCATTTAC-TTATGGTAATTATAGCTTAGTATAAG 11	10	10	CTGGAGTATGTCATGGTCATATTAAAATGTTAAAAATGTGATATCATTAGTCTAAATAGA 948

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123 4, 1 87, 85, 1, Ap 1, Ap	Sequence 85, App1 Sequence 87, App1 Sequence 9, Appli Sequence 11, App1 Sequence 90, App1	9	Sequence 83, Appl Sequence 83, Appl Sequence 83, Appl Sequence 84, Appl Sequence 7, Appli Sequence 7, Appli Sequence 108. Ap	e 80, e 82, e 4, 7 e 6, 7 e 1017	Sequence 89, Appl Sequence 21, Appl Sequence 21, Appli Sequence 4, Appli Sequence 6, Appli Sequence 80, Appli Sequence 80, Appl

ALIGNMENTS

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US-09-755-633-18

Sequence 18, Application US/09755633

Patent No. US20020127200A1

GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: WcCall, Catherine A.
APPLICANT: WcCall, CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633

CURRENT FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/807,306
PRIOR APPLICATION NUMBER: 60/807,306
PRIOR APPLICATION NUMBER: 60/807,306
PRIOR APPLICATION NUMBER: 60/807,306
PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21

SOFTWARE: DAYA

ORGANISM: Canis familiaris

FEATURE: NAME/KEY: intron

LOCATION: (171)..(373)

NAME/KEY: intron

LOCATION: (1405)..(1522)
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                                                                  Sequence 18, Application US/10787382

Publication No. US20040191868A1

GENERAL INFORMATION:

APPLICANT: Yang, Shumin

APPLICANT: Weber, Eric R.

APPLICANT: Weber, Eric R.

TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC COURTENT APPLICATION NUMBER: US/10/787,382

CURRENT APPLICATION NUMBER: US/10/787,382

CURRENT APPLICATION NUMBER: US/99/755,633

PRIOR APPLICATION NUMBER: US/99/755,633

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21

SOFTWARE: Patentin Ver. 2.1

SOO ID NO 18
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LENGTH: 1658
TYPE: DNA
ORGANISM: Canis familiaris
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LOCATION: (1405)..(1522)
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APPLICANT: Yang, Shumin
APPLICANT: MCCAll, Catherine A.
APPLICANT: MCCAll, Catherine A.
APPLICANT: MCCAll, Catherine A.
TITLE OF INVENTION: CANINE AND FELINE IMMUNITITLE OF INVENTION: ACID MOLECULES, AND USE
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver: 2.1
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US-09-755-633-19/c
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APPLICANT: Wang, Shumin
APPLICANT: Weber, Bric R.
APPLICANT: Weber, Bric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/9/755,633
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-28
INUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 19
LENGTH: 1658
TYPE: DNA
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Publication No. US20040191868A1
GENERAL INFORMATION:
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FILE REFERENCE: 254622US

CURRENT APPLICATION NUMBER: US/10/880,101A

CURRENT FILING DATE: 2004-06-30

PRIOR APPLICATION NUMBER: PCT/IB03/006446

PRIOR FILING DATE: 2003-12-31

PRIOR APPLICATION NUMBER: US 10/659,295

PRIOR FILING DATE: 2003-09-11

PRIOR FILING DATE: 2003-09-11

PRIOR APPLICATION NUMBER: US 10/331,755

PRIOR APPLICATION NUMBER: US 10/331,755

PRIOR PILING DATE: 2002-12-31

NUMBER OF SEQ ID NOS: 94
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 91, Application US/10880101A Publication No. US20050142102A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                   APPLICANT: SCHAEBITZ, WOLF-RUEDIGER APPLICANT: SCHNEIDER, ARMIN APPLICANT: KRUEGER, CAROLA
                                                                                                                                                                                     APPLICANT: GASSLER, NIKOLAUS
TITLE OF INVENTION: METHODS OF TREATING NEUROLOGICAL CONDITIONS
TITLE OF INVENTION: GROWTH FACTORS
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KRUEGER, CAROLA
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SCHWAB, STEFAN
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Sequence 78, Application US/09800629A
Patent NO. US20020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Marras, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
APPLICANT: MINIMARY ROBERT
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APPLICANTION: TRANSDUCTION
FILE REFERENCE: 15PH-6537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
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; PRIOR APPLICATION NUMBER: PCT/US00/07318; PRIOR FILING DATE: 2000-03-17; PRIOR APPLICATION NUMBER: 09/280,799; PRIOR FILING DATE: 1999-03-26; NUMBER OF SEQ ID NOS: 210; SOFTWARE: PatentIn Ver. 2.0; SEQ ID NO 78; SEQ ID NO 78; LENGTH: 3230; TYPE: DNA; ORGANISM: Homo sapiens
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RESULT 7

US-10-679-532-78

US-10-679-532-78

Sequence 78, Application US/10679532

Publication No. US20040121376A1

GENERAL INFORMATION:

APPLICANT: Dean, Nicholas M.

APPLICANT: McKaras, James G

APPLICANT: McKay, Robert

APPLICANT: Manoharan, Muthiah

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TITLE OF INVENTION: TRANSDUCTION
FILE REPERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
FRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: PATENTIN VEY: 2.0
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Best Local Similarity
Matches 1212; Conserv
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TYPE: DNA
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GENERAL LAFORMATION:
APPLICANT: SCHNEIDER, ARMIN
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APPLICANT: SOMMER, CLEMENS
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                         CAATATCT-----CCTCTGTTCTTTTAACAGAAAAGGTGTGCAGGAGAAAGATGGAGAG 1550
                                                                                  TGTCCTGGCTG
                                                                                                                    AATAAAAGAACACATAGAGCGCCAAAAAAGTAAGTTAAAGACATTTGGCAAAAAACTTAAGT
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GENERAL INFORMATION:

APPLICANT: Yang, Shumin

APPLICANT: Yang, Shumin

APPLICANT: McCall, Catherine A.

APPLICANT: McCall, Catherine A.

APPLICANT: McCall, Catherine A.

APPLICANT: McCall, Catherine A.

APPLICANT: McCall, Catherine A.

APPLICANT: McCall, Catherine A.

APPLICANT: McCall, Catherine A.

FILLE OF INVENTION: CANUME AND FELINE IMMUNOREGULATORY PROTEINS, NUC:

FILLE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILLE REFERENCE: IM-2-C1-C1

CURRENT APPLICATION NUMBER: US/09/755,633

CURRENT FILING DATE: 2001-01-05

PRIOR APPLICATION NUMBER: 09/322,409

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21

CORPURADE: OF SEC ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; SOFTWARE: Patentin Ver. 2.1; SEQ ID NO 21; LENGTH: 671; TYPE; DNA; ORGANISM: Canis familiaris US-09-755-633-21
RESULT 10
US-10-787-382-21
; Sequence 21, Application US/10787382
; Publication No. US20040191868A1
, GENERAL INFORMATION:
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US-09-755-633-21
Sequence 21, Application U
Patent No. US20020127200A1
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Best Local Similarity
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   Sequence 4, Application US/09755633

Patent No. US20020177200A1

GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 21
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APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
TITLE OF INVENTION: CAID MOLECULES, AND USES THEREOF
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: US/99/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SEQ ID NO 21
LENGTH: 671
TYPE: DNA
ORGANISM: Canis familiaris
US-10-787-382-21

A CORE 406; DB 19; Length 671;
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Best Local Similarity
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TYPE: DNA
; ORGANIEM: Canis familiaris
US-09-755-633-6
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SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 6, Application US/09755633
Patent No. US20020127200A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT FILING DATE: 2001-01-05
CURRENT FILING DATE: 2001-01-05
CURRENT FILING DATE: 2001-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 179; Conservative
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Best Local Similarity 93.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: CDS
LOCATION: (29)..(430)
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                                                                    AGACCTTGACACTGCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCT 180
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TTTTGATTCCT 191
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                                  AGACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGAACCTGATGA 429
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                                                                                                                                                                                                                                                                      10.4%;
93.7%;
                                                                                                                                                                                                                                                 Score 171.8; DB 9
Pred. No. 2.1e-25;
0; Mismatches 12
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Pred. No. 2.1e-25;
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                                                                                                                                                                                                                                                                                     Length 610;
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Sequence 82, Application US/10218654

Publication No. US20030099609A1

GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Wonderling, Ramani S.

ITILE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC

ITILE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C1

CURRENT APPLICATION NUMBER: US/10/218,654

CURRENT FILING DATE: 2002-08-13

PRIOR APPLICATION NUMBER: US/09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306

PRIOR APPLICATION NUMBER: 60/087,306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 80
LENGTH: 610
TYPE: DNA
ORGANIEM: Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
US-10-218-654-82/c
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US-10-218-654-80
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Best Local Similarity
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APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani
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TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: CDS
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Pred. No. 2.1e-25;
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GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
ITITLE OF INVENTION: CANINE AND FELLNE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 1902-09-30
PRIOR APPLICATION NUMBER: US/9/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR PILING DATE: 1999-05-28
PRIOR PILING DATE: 1999-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: 1998-05-29
US-10 NO 80
LENGTH: 610
TYPE: DNA
CARANISM: Canis familiaris
PEATURE:
NAME/KEY: CDS
LOCATION: (29)..(430)
US-10-262-439-80
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Matches 179; Conservative
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Best Local Similarity 93.7%;
Matches 179; Conservative
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AUTHORS
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Canis familiaris
                                                                                                                                                                                           Email: ekirknes@tigr.org
                                                                                                                                                                                                    Tel: 301-838-0200
Fax: 301-838-0208
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3.6	3.6	3.7	3.7	3.7	3.7	3.7	ა . 8	3.8	ა . მ	ა . B	3.9	3.9	3.9	3.9	4.0	4.0	4.0	4.1	4.1	4.1
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AL064091 Drosophil	AU037847 AU037847	AL078714 Drosophil	BH509089 BOGGW05TF	BH166228 ENTQX57TF	AL217379 Tetraodon	CG753083 P048-1-C0	AG320553 Mus muscu	AL106171 Drosophil	AL106396 Drosophil		AL055440 Drosophil	AQ248202 HS_2045_B	AL069706 Drosophil	AL071865 Drosophil	AL069706 Drosophil	AG340947 Mus muscu	AL108176 Drosophil	AL206908 Tetraodon	AL063921 Drosophil	CR026247 Reverse s

ALIGNMENTS

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Pissipedia; Canidae; Canis.

1 (bases 1 to 622)

Kirkness, E.F., Bafna, V., Halpern, A.L., Levy, S., Remington, K., Kirkness, E.F., Bafna, V., Pop, M., Wang, W., Fraser, C.M. and Wasch, D.B., Delcher, A.L., Pop, M., Wang, W., Fraser, C.M. and CE331159 622 bp DNA linear GSS 26-SEP-20 tigr-gss-dog-17000333986568 Dog Library Canis familiaris genomic, genomic survey sequence. Contact: Kirkness EF
The Institute for Genomic Research
Department of Eukaryotic Genomics,
Rockville, MD 20850, USA The dog genome: survey sequencing and comparative analysis Science 301 (5641), 1898-1903 (2003) TTTTGATGAATTATATTTTTTAAAATCTTCCTCATTTAGCACCAACTGTGCATTAAAGAA 1296 TTGTTTTGATGAATATATTTTTAAATCTTCCTATTTAGCACCAACTGTGCATTAAAGAA /organism="Canis familiaris"
/mol_type="genomic DNA"
/strain="Standard Poodle"
/db_xref="taxon:9615"
/clone_lib="Dog Library"
/note="Gite_l: BstXI; Libraries were prepared from peripheral blood" Score 398; DB 9 Pred. No. 6e-71; D; Mismatches TIGR, 9712 Medical Center Drive 9; Length 622; Indels GSS 26-SEP-2003 0; Gaps 62 0

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RESULT 2
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                                                                                                                                                                               Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert Clone from S. Wiemann,
Molecular Genome Analysis, German Cancer Research Center (DKFZ);
Email s. wiemann@dkfz-heidelberg.de; sequenced by GBF (National
Research Centre for Biotechnology Ltd., Braunschweig/Germany)
within the cDNA sequencing consortium of the German Genome Project.
This clone (DKFZp469N2214) is available at the RZPD in Berlin.
Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further
information about the clone and the sequencing project is available
at http://mips.gsf.de/projects/cdna/.
                                                                                                                                                                                                                                                                                                                                                                                 Bloecker, H., Boecher, M., Brandt, P., Mewes, H.W., Weil, B., Osanger, A., Fobo, G., Han, M. and Wiemann, S. Pongo pygmaeus mRNA (Bloecker, H., Boecher, M., Brandt, P., Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
1 (bases 1 to 495)
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                                                                                                                          organism="Pongo pygmaeus"
/mol_type="mRNA"
/db_xref="taxon:9600"
                                        /cione_lib="469 (synon)
/note="Vector: pSport1
  .4*;
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                                        ym: pkid1)"
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Strauberg, L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
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Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
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Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
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Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, B.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schmerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
AL. Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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817 bp mRNA linear Homo sapiens cDNA clone IMAGE:7216996, containing
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Anup Madan, University of Iowa
Tissue Procurement: Anup Madan, University of Iowa
cDNA Library Preparation: Anup Madan, University of Iowa
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Neurogenomics Research Lab,
DNA Sequencing by: Neurogenomics Research Lab,
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This clone has the following problem: frame shifted.
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585603.
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 463)
                                                                                                                                                                                                                                                                    463 bp tagencourt 14496865 NIH MGC 195 Homo IMAGE:6971769 5', mRNA sequence CD55955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (16-APR-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jessica Fahey, Tim Nelson, Jae Goon Yoon and Anup Madan
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                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                 CD559535.2 GI:38558950
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75.9%;
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 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 456)
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                                                             Homo sapiens
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BC066281.1
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75.3%;
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122 GACCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCTT 181
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bloscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 found through the I.M.A.G.E. Con http://image.llnl.gov plate: IRBK1 row: g column: 08 High quality sequence stop: 463.
                                                                                                                                                   BC066281
456 bp mRNA linear Homo sapiens cDNA clone IMAGE:6971770, containing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGA 121
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GI:42490969
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frame-shift HTC 12-FEB-2004

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JOURNAL
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AUTHORS
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Klausher, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
Abramson, R.D., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.M.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Butferfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Generation and initial analysis of more than 15,000 full-length
human and mouse chua semences
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Submitted (03-FBB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Gene Collection (MGC), Cancer Gene Collection (MGC), Cancer Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAK Plate: 172 Row: a Column: 17
This clone was selected for full length sequencing because it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Strausberg, R.
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human and mouse cDNA sequences

1 (26), 16899-16903 (2002)
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                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                     CAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTGCTAGCTCTTG 63
CCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCTTTT 183
                                                        GAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAGAGA
                                                                                              GGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGA
                                                                                                                                                                            CAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTTGCTAGCTCTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone was selected for full length sequencing because it
                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6971770"
/tissue_type="PCR_rescued_c
/clone_Tib="NIH_MGC_195"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .456
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               http://www-shgc.stanford.edu
(Dickson, Mark) mcd@paxil.stanford.edu
M., Schmutz, J., Grimwood, J., Rodriquez,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                note="Vector: pDNR-Dual"
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75.5%;
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                                                                                                                                                                                                                                                                                                Score 114.4; DB Pred. No. 6e-13; 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                         Length 456;
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BC066279
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ORGANISM
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                                                        source
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Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsiah, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Gibbs, R.A.,

Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Gibbs, R.A.,

Villalon, D.K., Muzny, D.M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,

Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,

Butterfield, X.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,

Generation and mouse CNNA semences
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
Meb site:
http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and
                                                                                                       Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINI at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 15 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032 This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (03-FEB-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A. 9
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                           1. .458
                                                                                 Location/Qualifiers
                         /organism="Homo sapiens"
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                                                                                                                                                                                                                  AUTHORS
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Klausner, R. D., Collins, F. S., Wagner, L., Shenmen, C. M., Schuler, G. D.,
Altschul, S. F., Zeeberg, B., Buctow, K. H., Schaefer, C. F., Bhat, N. K.,
Hopkins, R. F., Jordan, H., Moore, T., Max, S. I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A. A., Rubin, G. M., Hong, L.,
Scheetz, T. E., Brownstein, M. J., Ugdin, T. B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S. S., Loquellano, N. A., Peters, G. J.,
Abramson, R. D., Millahy, S. J., Bosak, S. A., McEwan, P. J.,
McKernan, K. J., Malek, J. A., Gunaratne, P. H., Richards, S.,
Worley, K. C., Hale, S., Garcia, A. M., Gay, L. J., Hulyk, S. W.,
Villalon, D. K., Muzny, D. M., Sodergren, E. J., Lu, X., Gibbs, R. A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A. C., Shevchenko, Y.,
Bouffard, G. G., Blakesley, R. W., Touchman, J. W., Green, E. D.,
Dickson, M. C., Rodriguez, A. C., Grimwood, J., Schmutz, J., Myers, R. M.,
Schnerch, A., Schein, J. E., Jones, S. J. and Marra, M. A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
Langer, M. S. L. W. S. M. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L. S. L.
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                                                                           Direct Submission
Submitted (03-FEB-2004) National Institutes of Health, Mammalian
Gene Collection (MCC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
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NIH-MGC Project URL: http://mgc.nci.nih.Contact: MGC help desk
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/clone="IMAGE:6971768"
/tissue_type="PCR rescued c
/clone_Tib="VIH_MGC_195"
/lab_host="DH10B"
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Pred. No. 6e-13;
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Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics National Cancer Institute / NIH . Bldg. 31 Rm10A07 Bethesda, MD 20892 Email: cgapbs r@mail.nih.gov Tissue Procurement: Narayan Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 172 Row: a Column: 16 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 28559032 This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA Library Preparation: Bhat Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Sequencing Group at the Stanford Human Center, Stanford University School of Medicine, Stanford,
                                                                                                                                                                                                                                                                                            CD559688
CD559688.2 GI:38453486
EST.
                                                                                                               NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
On Jun 10, 2003 this sequence version replaced gi:31585756.
                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 467)
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ACENCOURT 14496964 NIH MGC_195 H
IMAGE:6971770 5', mRNA sequence.
CD559688
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/tissue_trype="PCR rescued clones"
/clone_Tib="NIH MGC_195"
/lab_bost="DH10B"
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/mol_type="mRNA"
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lickson, Mark) mcd@paxil.stanford.edu
Schmutz, J., Grimwood, J., Rodriquez,
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Best Local Similarity 75.5%;
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1 (bases 1 to 467)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                   467 bp mRNA linear ES: AGENCOURT 14496838 NIH MGC 195 Homo sapiens cDNA clone IMAGE:6971768 5', mRNA sequence.
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High quality sequence start: 11
High quality sequence stop: 467.
                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                CD559690.2 GI:38453490
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
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/mol type="mRNA"
/db xref="raxon:9606"
/db xref="raxon:9606"
/clone="IMAGE:6971770"
/tissue_type="mixed"
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Pred. No. 6.1e-13;
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JOURNAL COMMENT
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KEYWORDS
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                                                                                                         DEFINITION
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On Jun 10, 2003 this sequence version replaced gi:31585758.
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
CD559687
CD559687.2 GI:38453484
EST.
                                                                           CD559687
AGENCOURT 14497029 NIH MGC 195 F
IMAGE: 6971771 5', mRNA sequence
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Tissue Procurement: Narayan Bhat
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Bldg. 31 Rm10A07 Bethesda, MD 20892
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
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/(clone="IMAGE: 6971768"
/(lab_host="IMAGE: 6971768"
/(lab_host="DHSA (T1 phage-resistant)"
/(clone lib="NIH MGC 195"
/(clone lib="NIH MGC 195"
/(clone lib="NIH MGC 195"
/(note="Vector: pDNR-Dual; Site_1; loxp-Sall; Site_2:
loxp-HindIII; Clones from this library have been
PCR-amplifised using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR 1s cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxp sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Barl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, MD 21702). For
information on which gene each clone represents, please
visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/mol_type="mRNA"
/db_xref="taxon:9606"
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Homo sapiens cDNA clone
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Best Local Similarity
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Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                             CCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCTTTT 183
                                               CTGTTCCT 282
                                                                                              TGATTCCT 191
                                                                                                                                                  CCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /lab host="DHSA (TI phage-resistant)"
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/note="Vector: DDNR-Dual; Site_1: loxP-SalI; Site_2:
/note="Vector: DDNR-Dual; Site_1: loxP-SalI; Site_2:
/note="Vector: DDNR-Dual; Site_1: loxP-SalI; Site_2:
/noxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSegl. Template for PCR is CDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
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PCR products are directionally cloned into the loxP sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
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a Note: this is a NIH_MGC Library."
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/clone="IMAGE:6971771"
/tissue_type="mixed"
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Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 114.4; DB 6; Length 470;
Pred. No. 6.1e-13;
0; Mismatches 46; Indels 0
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AUTHORS
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ORGANISM
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                                                                                                                                                                                                                                            Best Local
Matches 1
                                                                                                                                                                                                                                                                                                Query Match
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124 CCTTGACACTGCTCTCCACTCATCGAACTTGGCTGATAGGCGATGGGGTAATTTTCTTTT 183
                                                 412 GAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCCACAAGTGCATTGGTGAAAGAGA
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142;
64 GGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGA 123
                                                                                                 4 CAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTTGAGTTTTGCTAGCTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  National Cancer Institute / NIH
Bidg. 31 Rm.10A07 Bethesda, MD 20892
Email: cgapbs-remail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Preparation: Bhat I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CD559689 473 bp mRNA linear ES' AGENCOURT 14496901 NIH_MGC_195 Homo sapiens cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    On Jun 10, 2003 this sequence version replaced gi:31585757.
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                                                                                                                                                                                                                          Similarity
                                                                   CAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTG
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Location/Qualifiers
                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone="IMAGE:6971769"
/clone="IMAGE:6971769"
/tissue_type="mixed"
/lab_host="DH5A (T1 phage-resistant)"
/lab_host="DH5A (T1 phage-resistant)"
/clone_lib="NIH MGC 195"
/clone_lib="NIH MGC 195"
/note="Vector: DDNR-Dual; Site_1: loxp-Sall; Site_2:
loxp-HindIII; Clones from this library have been
loxp-HindIII; Clones from this library have been
loxp-HindIII; Clones from serific primers to contain the
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polya RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Ber III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please
                                                                                                                                                                                                                                                                                                                                                   visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                       Score 114.4; DB 6
Pred. No. 6.1e-13;
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CD559534
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                                                   Query Match
Best Local Similarity
                                   Matches 142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
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4 CAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTGCTAGCTCTTG 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             On Jun 10, 2003 this sequence version replaced gi:31585602. Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CD559534 478 bp mRNA linear ES: AGENCOURT 14496928 NIH MGC_195 Homo sapiens cDNA clone IMAGE.6971770 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: IRBK1 row: g column: 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           National Cancer Institute / NIH
Bldg. 31 Rm.10A07 Bethesda, MD 20892
Email: cgapbe-remeil.nih.gov
Tissue Procurement: Narayan Bhat
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NIH-MGC http://mgc.nci.nih.gov/.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
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Location/Qualifiers
                                   Conservative
                                                                                                                                                              visit our anonymous ftp site at
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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75.5%;
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                                 Score 114.4; DB (
Pred. No. 6.1e-13,
0; Mismatches 4(
                                   Indels
                                                                  Length
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On Jun 10, 2003 this sequence version replaced gi:31585601.
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg: 31 Rm10A07 Bethesda, MD 20892
Email: cgapbe-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: Bhat Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: IRBK1 row: g column: 10
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1 (Dases 1 to 492)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
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AGENCOURT 14496993 NIH MGC 195 H
IMAGE:6971771 5', mRNA sequence.
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High quality sequence stop: 492.
Location/Qualifiers
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/note="Vector: pDNR-Dual; Site_1: loxp-Sall; Site_2:
/note="Vector: pDNR-Dual; Site_1: library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
(from BD Biosciences/Clontech and Washington University).
PCR products are directionally cloned into the loxp sites
of the pDNR-Dual vector. Library constructed by Dr.
Narayan Bhat, Earl Bere III and Hongling Liao (Gene
Expression Laboratory, Research Technology Program, SAIC
Frederick, NCI-Frederick, Frederick, ND 2702). For
                           information on which gene each clone represents, visit our anonymous ftp site at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6971771"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSv.dat
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95 Homo sapiens cDNA clone
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CD559536
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGENCOURT 14496804 NIH MGC_195 Homo sapiens cDNA clone IMAGE:6971768 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 CAAACACTGAACATTTCAGAGCTATGAGAATGCTTCTGAATTTGAGTTTTGCTAGCTCTTG 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                Tissue Procurement: Narayan Bhat CDNA Library Preparation: Bhat Laboratory CDNA Library Preparation: Bhat Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: IRBK1 row: g column: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                On Jun 10, 2003 this sequence version replaced gi:31585604 Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 489)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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Bldg. 31 Rm10A07 Bethesda, MD 20892
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs-r@mail.nih.gov
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGCTGCCTATGTTTCTGCCTTTGCTGTAGAAAATCCCCATGAATAGACTGGTGGCAGAGA 123
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quality sequence start: 17
quality sequence stop: 489.
Location/Qualifiers
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                   /lab_host="DHSA (Ti phage-resistant)"
/clone lib="NIH MGC 195"
/clone lib="NIH MGC 195"
/note="Vector: pDNR-Dual; Site_1: loxP-Sall; Site_2:
loxP-HindIII; Clones from this library have been
PCR-amplified using gene-specific primers to contain the
complete open reading frame (based on known gene sequences
available from NCBI's RefSeq). Template for PCR is cDNA
derived from either pooled cytoplasmic polyA RNA from 30
cells lines or pooled total RNA from 10 different tissues
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                                                                                                                                                                                                                                  /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6971768"
/tissue_type="mixed"
                                                                                                                                                                                                                                                                                                       organism="Homo sapiens"
mol_type="mRNA"
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75.5%;
BD Biosciences/Clontech and Washington University)
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Pred. No. 6.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethedda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
cDNA Library Preparation: Bhat Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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AGENCOURT 14497093 NIH_MGC_195 Homo sapiens cDNA clone
IMAGE:6971772 3', mRNA sequence.
CD559686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: IRRL row: g column: 11
High quality sequence stop: 456.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CD559686.1 GI:31585754
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ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat
a Note: this is a NIH_MGC Library."
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/organism="Homo sapiens"
/organism="Homo sapiens"
/mal_type="maNA"
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Pred. No. 1.1e-12;
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Search completed: August 8, 2005, 08:46:11 Job time: 7058.44 secs
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Best Local Similarity 74.5%;
Matches 140; Conservative
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                                                                                                                                                                                                                                                                                                                                124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR-amplified using gene-specific primers to contain the complete open reading frame (based on known gene sequences available from NCBI's RefSeq). Template for PCR is cDNA derived from either pooled cytoplasmic polyA RNA from 30 cells lines or pooled total RNA from 10 different tissues (from BD Biosciences/Clontech and Washington University). PCR products are directionally cloned into the loxP sites of the pDNR-Dual vector. Library constructed by Dr. Narayan Bhat, Earl Bere III and Hongling Liao (Gene Expression Laboratory, Research Technology Program, SAIC Frederick, NCI-Frederick, Frederick, MD 21702). For information on which gene each clone represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed_plates/IRBK.preSV.dat a Note: this is a NIH_MGC Library."

    $: Score 111.2; DB 6; Length 456;
    $: Pred. No. 2.7e-12;
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L26033 Cercocebus	I71456 Sequence 2	AR254538 Sequence		BD211604 Canine an	I39768 Sequence 41	AC148855 Otolemur	AC148886 Otolemur	U34588 Cavia porce		AC151015 Callithri	AF051372 Felis cat	U91947 Equus cabal	AC149665 Bos tauru	AF025436 Felis cat	Z67872 B.taurus mR	AF068770 Felis cat	AJ133452 Sus scrof	AJ010088 Sus scrof	U17052 Ovis aries	U35038 Ovis aries	AF331920 Canis fam	AX083948 Sequence	AF091133 Canis fam	AR254497 Sequence	

ALIGNMENTS

DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM RESULT 1 AF331919 REFERENCE REFERENCE FEATURES **LOCUS** JOURNAL MEDLINE PUBMED AUTHORS TITLE JOURNAL source Yang, S., Sellins, K.S., Weber, B. and McCall, C. Canine interleukin-5: molecular characterization of the gene and expression of biologically active recombinant protein J. Interferon Cytokine Res. 21 (6), 361-367 (2001) Canis familiaris Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis. 1 (bases 1 to 610) AF331919 610 bp mRNA linear Canis familiaris interleukin-5 mRNA, complete cds. Prospect Parkway, Ft Collins Location/Qualifiers Submitted (22-DEC-2000) Immunology, Heska Corporation, 1613 Prospect Parkway, Ft Collins, CO 80525, USA Yang, S. Direct Submission AF331919.1 GI:15919180 21334408 Canis familiaris (dog) 11440633 (bases 1 to 610) /db_xref="taxon:9615" /organism="Canis familiaris" /mol_type="mRNA" 29. .433 MAM 04-OCT-2001

ORIGIN

3'UTR

Query Match

100.0%;

Score 610;

DB 4.

Length 610;

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REFERENCE
AUTHORS
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LOCUS
DEFINITION
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                   BURARYOTA; Metazoa; Chordata; Craniata; Vertebrata; But Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Car Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Car (Dases 1 to 610)

1 (bases 1 to 610)

Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nucleic ac and method of using the same
Patent: JP 2002516104-A 64 04-JUN-2002;
HESKA CORP
Canie familiaris (dog)
PN JP 2002516104-A/64
PD 04-JUN-2002
PF 28-MAY-1999 US 60/087306
PI GEKKEE SIM,SHDMIN YANG,MATTHEW J DREITZ,RAMANI S PRINCESSIM,SHDMIN YANG,MATTHEW J DREITZ,RAMANI S PRINCESSIM S PRINCESSIM S PRINCESSIM S PRINCESSIM S PRINCESSIM S PRINCESSIM S PRINCESSIM S PRINCESSIM S PRINCESSIM S PRINCESSIM S PRINCESSIM S 
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and method of using the same.
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JP 2002516104-A/64
04-JUN-2002
20-MAY-1999 JP 2000551002
29-MAY-1999 US 60/087306
29-MAY-1999 US 60/087306
GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S
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PC C07K14/54,
PC C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10, PC G01N33/15,
PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC Canine and feline immunoregulatory proteins, nucleic acid CC method of using the same CC method of using the same FH Key Location/Qualifiers
FT CDS (29), (430).
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ilarity 100.0%; Pred. No. 0;
Conservative 0; Mismatches
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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PC C07K14/54,
PC C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10,
PC C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10,
PC G01N33/15,
PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC Canine and feline immunoregulatory proteins, nucleic acid CC
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OS Canis familiaris (dog)
OS Canis familiaris (dog)
PN JP 2002516104-A/65
PN JP 2002516104-A/65
PD 04-JUN-2002
PP 28-MAY-1999 UP 2000551002
PF 28-MAY-1999 US 60/087306
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PR C12N.15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,
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Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S. Canine and feline immunoregulatory proteins, nucleic canine and feline immunoregulatory proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and method of using the same Patent: JP 2002516104-A 65 04-JUN-2002;
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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R. Canine IL-4 immunoregulatory proteins and uses the Patent: US 6471957-A 80 29-OCT-2002;
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Unclassified.
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/mol_type="genomic:DNA"
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 82 29-OCT-2002;
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/mol_type="genomic"
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Sequence 80
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney II-13 immunoregulatory proteins and uses
Patent: US 6482403-A 80 19-MOV-2002;
Location/Qualifiers
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/mol_type="genomic
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,
Caniney IL-13 immunoregulatory proteins and use
Patent: US 6482403-A 82 19-NOV-2002;
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/mol_type="genomic DNA"
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S Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and feline immunoregulatory proteins, nucleic ac and method of using the same
L patent: JP 2002516104-A 66 04-JUN-2002;
HESKA CORP
Canis familiaris (dog)
PN JP 2002516104-A/66
PD 04-JUN-2002
PF 28-MAY-1999 US 60/087306
PI GEKKEE SIM,SHJMIN YANG,MATTHEW J DREITZ,RAMANI S W
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PC A61K45/00,A61K48/00,A61P
PC C07K14/54,
PC C07K14/56,C07K14/705,C07
PC G01N33/15,C12N15/00,A61K
And feline immunoregulatory p
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Canine and feline immunoregulatory proteins, nucleic acid molecules
and method of using the same.
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PR C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,

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/mol_type="genomic DNA"
/db_xref="taxon:9615"
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GTATTTCTTGGTGTAATAAACACCGAGTGGACACCGGAAAGT

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'LOASES I to 402)

Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.

Canine and feline immunoregulatory proteins, nucleic acic and method of using the same

JOURNAL Patent: JP 2002516104-A 67 04-JUN-2002;

HESKA CORP

VENT OS Canis familiaris (dog)
PN JP 2002516104-A/67
PD 04-JUN-2002
PF 28-MAY-1999 TP
PR 29-MAY-1999 TP
PR 29-MAY-1999 TP
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BD211561
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                               CAAAAAAAAAGGTGTGCAGGAGAAAGATGGAGAGGTGACAAAGTTCCTAGACTACCTGCAA
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Location/Qualifiers
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/db_xref="taxon:9615"
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                                                                                                        Sequence 84
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Sequence 83
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AR241538.1
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Sim,G-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses ther
Patent: US 6471957-A 83 29-CCT-2002;
Location/Qualifiers
1 (bases 1 to 402)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 84 29-OCT-2002;
                                                                   Unknown
                                                   Unclassified
                                                                               Unknown.
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/mol_type="genomic
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Pred. No. 3.2e-217;
0; Mismatches 0;
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.
Caniney IL-13 immunoregulatory proteins and uses
Patent: US 6482403-A 83 19-NOV-2002;
                                                                                                                                                                                                                                                                                                                                 Unknown.
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AR254494
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                                                         GCTGTAGAAAATCCCATGAATAGACTGGTGGCAGAGAGACCTTGACACTGCTCCCACTCAT
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/mol_type="genomic DNA"
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Sequence
AR254495
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Caniney II-13 immunoregulatory proteins and uses th
Patent: US 6482403-A 84 19-MOV-2002;
Location/Qualifiers
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/mol_type="genomic |
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1 (bases 1 to 405)
Guo, H., Lawton, R., Mermer, B. and Aiyappa, A.P.
Methods and compositions concerning canine in
Patent: US 6537781-A 1 25-MAR-2003;
Location/Qualifiers
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Canis familiaris
Canis familiaris
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
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Sequence 1 from
AR300436
                                                                              Guo,H., Lawton,R., Mermer,B. and Alyappa,A. Methods and compositions concerning canine Patent: WO 0111049-A 1 15-FEB-2001; IDEXX LABORATORIES, INC. (US)
On Jun 24, 2001 this sequence version repla Location/Qualifiers
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